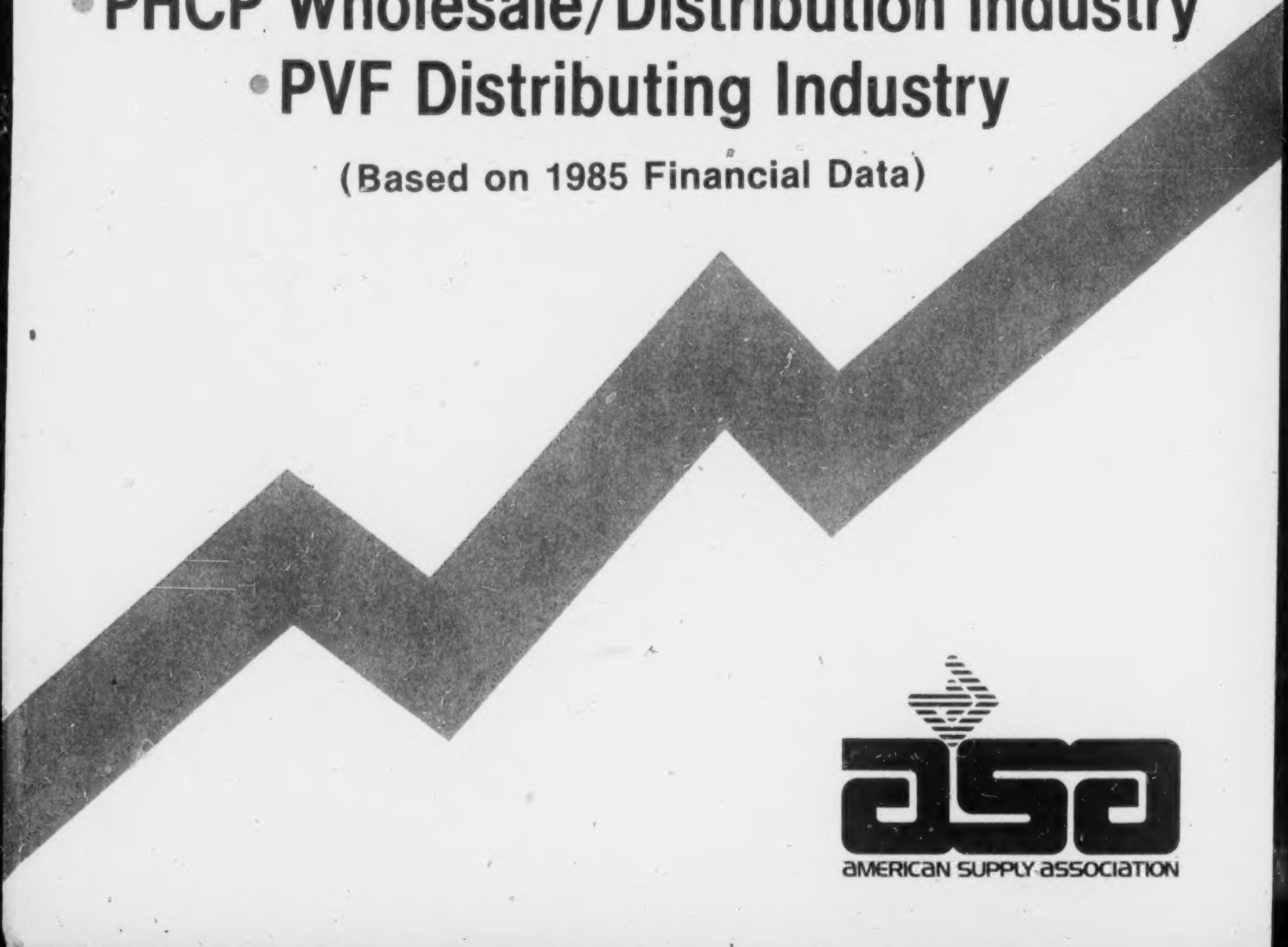
1986

OPERATING PERFORMANCE REPORT

for the

- **PHCP Wholesale/Distribution Industry**
- **PVF Distributing Industry**

(Based on 1985 Financial Data)



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For the fourth consecutive year, the 1986 ASA Annual Operating Performance Report was compiled, tabulated and analyzed by Industry Insights, Inc. in cooperation with the American Supply Association and key industry members.

Industry Insights, headquartered in Worthington, Ohio, is a professional research and consulting firm providing management and marketing services to trade and professional associations and their members. The company specializes in industry operating surveys, compensation studies, educational programs and customized research services.

(ADDITIONAL COPIES OF THE REPORT ARE AVAILABLE FROM THE ASA OFFICE.
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About This Report

This 1986 American Supply Association *Operating Performance Report of the P-H-C-P Wholesaler Industry* (Based on 1985 Financial Data) represents the most complete, accurate and up-to-date data base of P-H-C-P wholesaler financial and operating information published anywhere. The information contained in this report is designed to provide easy-to-understand guidelines for identifying business performance improvement opportunities.

For the fourth consecutive year, the *Operating Performance Report* (OPR) was prepared by Industry Insights, Inc. of Worthington, Ohio, working closely with the American Supply Association staff. Confidential survey forms (refer to Appendix for sample) were sent to ASA members in late March and 285 completed and usable responses were received, representing one of the largest data bases of respondents among any wholesale/ distribution industry.

As in the past, this year's report includes comparative financial ratios and statistics by type of firm, sales volume size, high profit firms and geographic region. In addition, building upon the excellent historical information that has resulted from past ASA operating performance surveys, this year's study contains various five year industry trend data, along with appropriate analysis and interpretation. Such information is important for identifying shifts occurring within the industry which may be representative of future conditions.

Also featured in this year's report is an overall analysis of industry performance relative to U.S. economic conditions, including both sales and profitability results. In addition, as in the past a listing of fiscal year-ends is included.

Perhaps the most valuable feature of the ASA *Operating Performance Report* is that *all* firms participating in the survey received, *absolutely free*, a confidential Individual Company Report. This report presents a company's own ratios and data computed in a manner consistent with those appearing in the industry report, and displayed alongside the appropriate industry comparatives. (A couple representative pages from a sample Individual Company Report are illustrated on the following page.)

As shown on any given line of the Individual Company Report a firm's own data is included along with industry averages for firms of a comparative sales volume, type of business, geographic region, etc. Thus, the individual owner/manager is provided invaluable information without having to spend time and effort making the calculations manually. In addition, this year's Individual Company Reports include *four-year trend data* in graphical form for any firm which participated in each of the ASA OPR studies conducted over the past four years.

SAMPLE

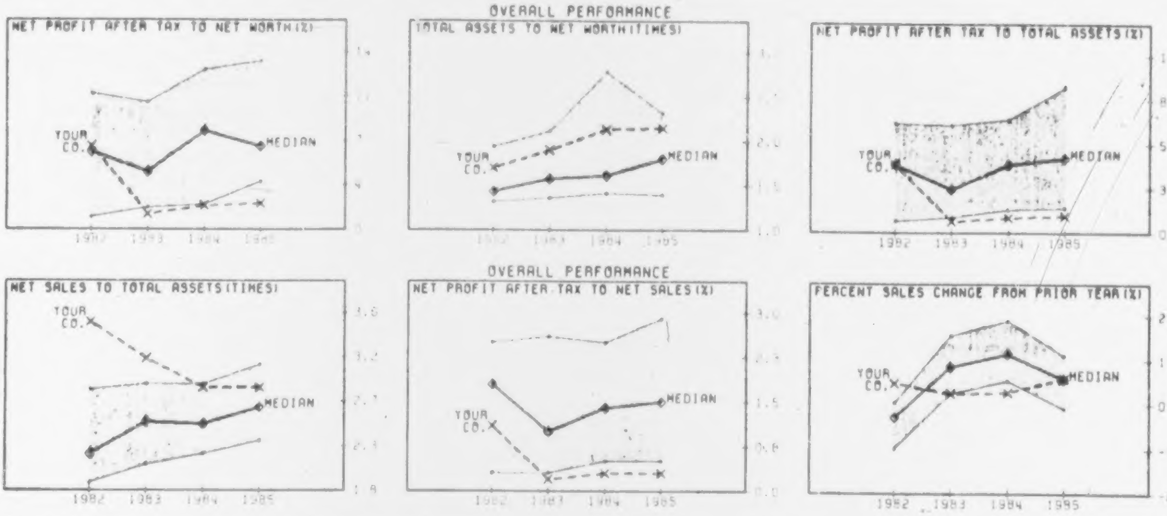
Individual Company Report

Company No. 500
Net Sales = $2,281,043

1986 ASA OPERATING SURVEY
INDIVIDUAL COMPANY REPORT
(1985 FISCAL YEAR)

SUMMARY PERFORMANCE EVALUATION
Your Firm's Performance Compared to "All Similar Firms"

Overall Performance		
Net Profit After Tax to Net Worth	???? WEAK ????	Investigate Further
Total Assets to Net Worth	???? FAIR ????	Some Concern Warranted
Net Profit After Tax to Total Assets	???? WEAK ????	Investigate Further
Net Sales to Total Assets	>>>> GOOD <<<<	Well Done
Net Profit After Tax to Net Sales	???? WEAK ????	Investigate Further
Sales Analysis		
Percent Sales Change from Prior Year	???? WEAK ????	Investigate Further
Gross Margin		
Gross Margin on Net Sales	>>>> GOOD <<<<	Well Done
Gross Margin on Direct Shipments	>>>> GOOD <<<<	Well Done
Gross Margin on Warehouse Sales	>>>> GOOD <<<<	Well Done
Asset and Financial Management		
Total Debt to Net Worth	???? FAIR ????	Some Concern Warranted
Current Assets to Current Debt	???? FAIR ????	Some Concern Warranted
Personnel Productivity		
Sales Per Employee	???? FAIR ????	Some Concern Warranted
Gross Margin Per Employee	???? FAIR ????	Some Concern Warranted
Payroll to Net Sales	???? WEAK ????	Investigate Further



	Your Firm	HIGH PROFIT FIRMS TYPICAL	HIGH PROFIT FIRMS MIDDLE RANGE	YOUR REGION TYPICAL	YOUR REGION MIDDLE RANGE
Overall Performance					
Net Profit After Tax to Net Worth	1.83%	10.62%	7.89 - 15.39%	6.39%	2.36 - 12.54%
Total Assets to Net Worth	2.14 TIMES	1.49X	1.25 - 1.96X	2.19X	1.59 - 3.15X
Net Profit After Tax to Total Assets	0.85%	6.37%	5.25 - 8.55%	2.93%	1.03 - 6.69%
Net Sales to Total Assets	2.84 TIMES	2.48X	2.23 - 3.42X	2.64X	2.07 - 3.04X
Net Profit After Tax to Net Sales	0.30%	2.40%	1.80 - 3.20%	1.40%	0.40 - 2.50%
Net Profit Before Tax to Net Worth	2.74%	16.51%	12.75 - 28.46%	8.17%	4.13 - 19.40%
Net Profit Before Tax to Total Assets	1.28%	10.53%	8.08 - 15.84%	3.76%	1.59 - 8.61%
EBIT to Total Assets	3.00%	13.60%	11.88 - 18.08%	7.89%	5.21 - 11.95%
Sales Analysis					
Net Sales($000)	$2,281	$8,137	$5,808 - 13,699	$4,701	$2,453 - 10,171
Percent Sales Change from Prior Year	3.40%	17.87%	11.07 - 29.67%	16.17%	8.23 - 27.14%
Sales Mix					
Direct Sales	12.0%	13.5%	4.8 - 23.3%	9.5%	3.0 - 16.7%
Warehouse Sales - Counter and Delivery	88.0%	86.5%	76.7 - 95.3%	90.5%	83.3 - 97.0%
TOTAL SALES	100.0%	100.0%	100.0 - 100.0%	100.0%	100.0 - 100.0%
Product Sales Mix					
Plumbing Supplies & Equipment	30 %	42.5%	40.0 - 49.5%	47.6%	26.5 - 75.0%
Heating & Cooling Supplies & Equipment	%	17.0%	2.5 - 27.5%	11.8%	0.0 - 20.0%
Industrial P-V-F (Pipes-Valves-Fittings)	30 %	29.2%	17.5 - 41.0%	21.8%	1.0 - 21.1%
Other Industrial Supplies & Equipment	30 %	6.0%	0.0 - 10.0%	6.5%	0.0 - 8.6%
Other Products	10 %	5.2%	0.0 - 10.0%	12.3%	0.0 - 21.7%
TOTAL SALES	100.0%	100.0%	100.0 - 100.0%	100.0%	100.0 - 100.0%
Gross Margin					
Gross Margin on Net Sales	25.2%	23.4%	20.4 - 25.6%	25.7%	23.2 - 28.4%
Gross Margin on Direct Shipments	11.0%	10.0%	7.9 - 12.9%	12.2%	9.3 - 16.7%
Gross Margin on Warehouse Sales	27.1%	25.9%	23.8 - 28.7%	27.2%	23.3 - 29.9%
Asset and Financial Management					
Current Asset Turn (Sales/Current Assets)	3.14 TIMES	3.31X	2.49 - 3.81X	2.99X	2.41 - 3.54X
Total Debt to Net Worth	114.1%	49.2%	25.8 - 96.1%	116.0%	58.0 - 210.1%
Current Debt to Net Worth	80.8%	49.2%	25.6 - 74.6%	68.9%	45.9 - 145.3%
Current Assets to Current Debt	2.40 TIMES	2.79X	1.98 - 3.97X	2.43X	1.80 - 3.49X
Current Assets Minus Inventory/Curr Debt	0.75 TIMES	1.45X	1.03 - 1.84X	0.95X	0.64 - 1.36X
Invoice/Transaction Data					
Billing Lines Per Invoice	6.3	5.9	5.0 - 8.8	5.0	3.9 - 6.5
Average Invoice Size	$109	$171	$133 - 255	$132	$87 - 206
Average Billing Line	$17.25	$30.03	$15.05 - 51.05	$29.74	$16.01 - 45.75

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P-H-C-P Wholesaling --
Overview of Industry Performance 1985

The U.S. economy's growth slowed during 1985. Gross national product (GNP), which is the overall measure of production of goods and servces in the economy, rose only 2.2% in 1985 after adjustment for the elimination of inflation. This slower growth comes on the heels of a 6.5% GNP advance in 1984, which represents one of the strongest growth years in the past decade. The moderate growth pace experienced in 1985 is expected to continue throughout the end of 1986.

1985 Sales Performance

Similar to the overall economy, the sales of wholesalers of hardware, plumbing, heating, air conditioning and refrigeration equipment slowed in 1985. According to data published by the U.S. Census Bureau, sales for this wholesale group increased by 9.1% in 1985 as compared to 16.7% in 1984. For the third consecutive year sales of hardware, plumbing, heating and cooling wholesalers outpaced the sales growth of all merchant wholesalers as a group (9.1% vs. 1.0%).

The continuing slowdown in growth is evidenced by the fact that sales of hardware, plumbing, heating and cooling wholesalers have increased 0.2% during the first four months of 1986 compared to the same four month period in 1985.

Once again the U.S. Census Bureau has revised it's wholesale sales figures, this time for the period 1976 through 1984. For this reason sales growth figures appearing in this year's report may not exactly match the same year's data published in previous ASA Operating Performance Reports. In most cases, the revisions did not cause significant changes.

The sales growth experienced in 1985 for ASA members responding to the survey was 8.3%, just slightly below the 9.1% reported by the U.S. Census Bureau (Exhibit 2). The strongest growth in 1985 came from wholesalers of Plumbing Equipment and Supplies with a sales increase of 9.8%. Industrial P-V-F firms, last year's strongest category (20.1%), was the second strongest category in 1985 with a sales growth of 9.5%.

In contrast to last year when in all of the four product emphasis groups the largest volume companies showed the strongest sales growth, most of the large volume groups in 1985 showed the slowest growth. This trend was evident in every product emphasis group except for Plumbing Equipment and Supplies, where the large volume firms actually had one of the highest sales growth rates (11.1%).

1985 Profitability Performance

Despite the slower sales growth in 1985, the overall profitability of P-H-C-P wholesalers improved in 1985. The return on net worth for the typical company participating in the ASA survey was 8.8%, up from 8.2% in 1984 (Exhibit 3). The most profitable firms in 1985 were Plumbing Equipment and Supplies wholesalers. Least profitable were the HVAC and Other Emphasis firms.

Exhibit 1
Growth of Hardware, Plumbing, Heating and Cooling
vs. All Wholesale Sales

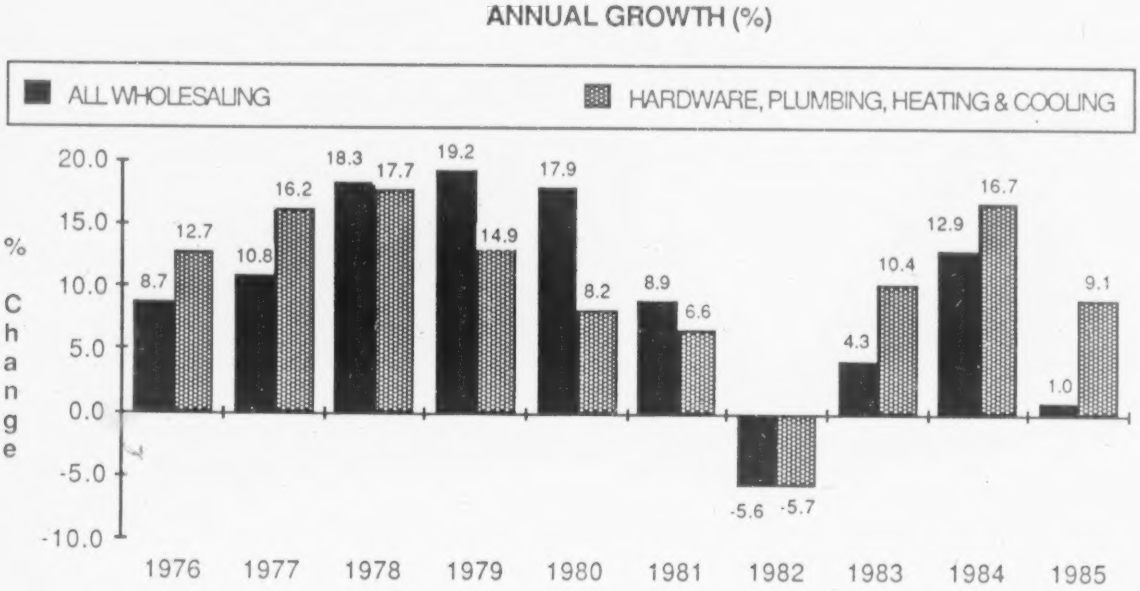


Exhibit 2
1985 Median Sales Growth

All P-H-C-P Wholesalers	8.3%
By Product Emphasis	
Plumbing Equipment and Supplies	9.8%
Industrial Pipes-Valves-Fittings (P-V-F)	9.5
Plumbing and Industrial P-V-F	7.3
HVAC and Other Emphasis	7.9
By Sales Volume	
Plumbing Equipment and Supplies:	
Sales Less Than $3 Million	6.8%
Sales $3 Million to $7 Million	11.1
Sales $7 Million to $12 Million	8.2
Sales Over $12 Million	11.1
Industrial P-V-F:	
Sales Less Than $4 Million	8.5%
Sales $ 4 Million to $12 Million	11.1
Sales Over $12 Million	4.8
Plumbing and Industrial P-V-F:	
Sales Less Than $3 Million	7.4%
Sales $3 Million to $7 Million	9.0
Sales Over $7 Million	3.4
HVAC and Other Emphasis:	
Sales Less Than $3 Million	8.7%
Sales $3 Million to $8 Million	9.2
Sales Over $8 Million	5.0

In only one of the four product emphasis groups (HVAC and Other Emphasis) did the largest volume firms have the best return on net worth.

Exhibit 3
1985 Median Return on Net Worth

All P-H-C-P Wholesalers	8.8%
By Product Emphasis	
Plumbing Equipment and Supplies	9.8%
Industrial Pipes-Valves-Fittings (P-V-F)	8.3
Plumbing and Industrial P-V-F	6.6
HVAC and Other Emphasis	6.4
By Sales Volume	
PLumbing Equipment and Supplies:	
Sales Less Than $3 Million	9.8%
Sales $3 Million to $7 Million	12.2
Sales $7 Million to $12 Million	6.4
Sales Over $12 Million	9.4
Industrial P-V-F:	
Sales Less Than $4 Million	0.0%
Sales $4 Million to $12 Million	9.9
Sales Over $12 Million	7.7
Plumbing and Industrial P-V-F:	
Sales Less Than $3 Million	ISD
Sales $3 Million to $7 Million	8.4%
Sales Over $7 Million	7.1
HVAC and Other Emphasis:	
Sales Less Than $3 Million	6.6%
Sales $3 Million to $8 Million	5.9
Sales Over $8 Million	6.8

ISD = Insufficient Data

P-H-C-P Wholesaling--1976 - 1985

Over the period from 1976 to 1985, sales of hardware, plumbing, heating and cooling wholesalers grew at a compound annual rate of 10.2%, out pacing the compound growth of all wholesale trade (9.4%).

Exhibit 4

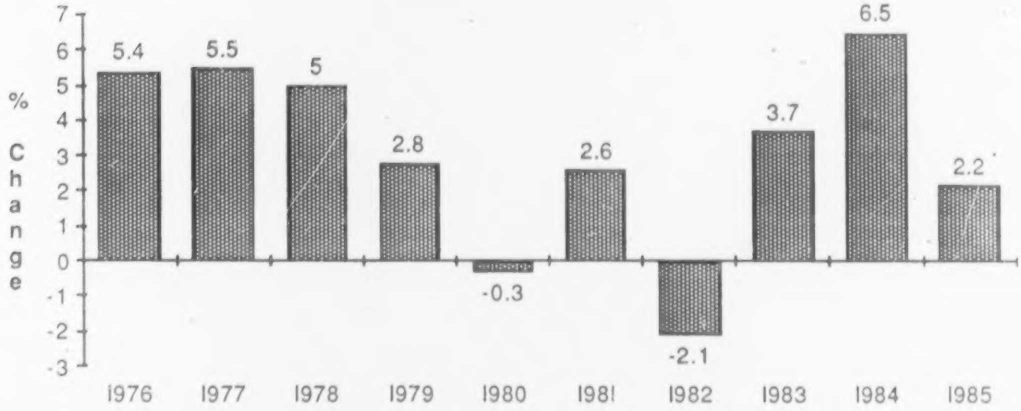
Annual Wholesale Sales Growth
1976 - 1985

All Wholesale Trade	9.4%
All Durables Wholesalers	10.3
Electrical Goods	12.7
Motor Vehicles and Automotive Equipment	10.1
Furniture and Home Furnishings	14.3
Machinery, Equipment and Supplies	9.0
Hardware, Plumbing and Heating Equipment	10.2

As the graph below indicates, the U.S. economy expanded at a much slower rate in 1985 than in 1984. This graph shows the "real growth of GNP, i.e. after the effects of inflation have been removed. When comparing numbers over a long period of time it is important to remove the effects of inflation because the rates have varied so much since 1976.

Exhibit 5

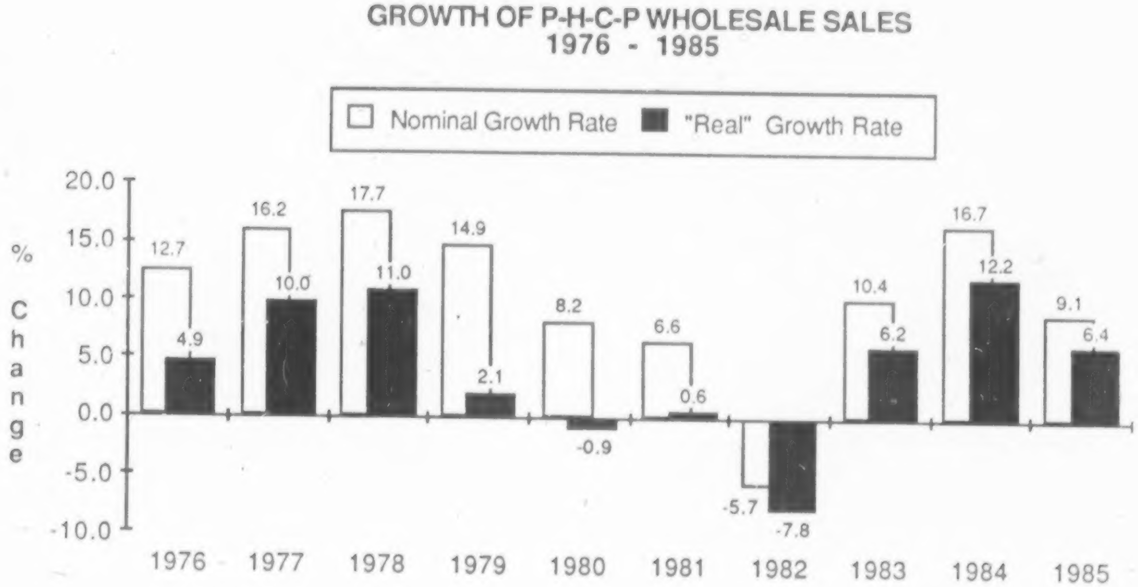
GROSS NATIONAL PRODUCT
"Real" Percent Change



The wisdom of removing the effects of inflation not only pertains to examining growth in the overall economy (GNP) but also to tracking individual industries. The graph below presents the nominal and real (inflation - adjusted) sales growth for P-H-C-P wholesalers for the period of 1976 to 1985.

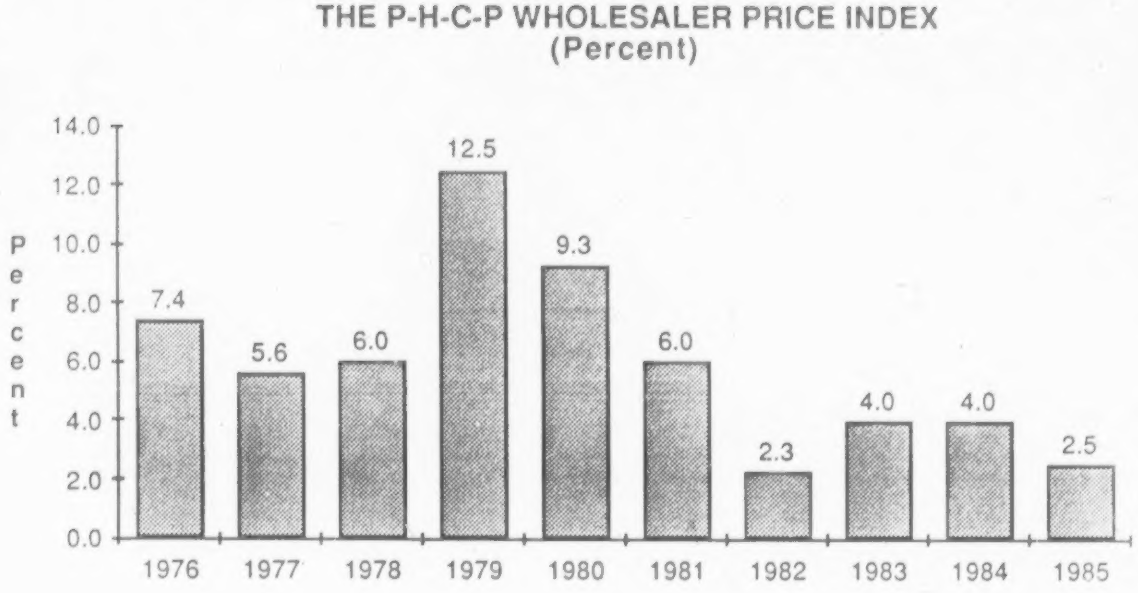
The graph highlights the fact that the years 1977, 1978, 1983 and 1984 were good years for P-H-C-P wholesalers. Using real sales growth provides an insight into the 1980-82 period which was one of negative real growth.

Exhibit 6



P-H-C-P wholesalers have experienced very low rates of inflation in the recent years. 1985 was no exception as the inflation rate dropped even lower than 1983 and 1984. According to the industry price index constructed by Alan Silver and Associates and published in The Wholesaler, inflation was 2.5% in 1985. The Silver / Wholesaler price indexes for the years 1976 - 1985 appear in Table 7. These figures were used to deflate the P-H-C-P industry sales figures in Table 6. The moderate inflation rates of the past 5 years are a welcome sight after the "double digit" year of 1979.

Exhibit 7



Source: Alan Silver & Associates, Inc. and The Wholesaler.

How To Use This Report

The 1986 ASA Operating Performance Report of the P-H-C-P Wholesaler Industry has been designed to help P-H-C-P wholesalers evaluate their own performance relative to that of similar companies in order to identify improvement opportunities. The statistics in this report represent broad performance "yard-sticks" against which a company's performance can be measured.

Using this information P-H-C-P wholesalers can compare their own firm's financial and operating performance with the industry as a whole; with firms having the same areas of product emphasis; with firms of a comparable sales volume and/or geographic region; and with the highest profit firms. Spotting significant differences between your own firm's performance and the industry composites can be the first step toward improving performance. Keep in mind, however, that deviations from industry norms do not automatically call for some action on your part. The most important thing to do is to be able to explain why your firm experienced significant deviations from the "typical" wholesaler in the industry.

In order to obtain maximum advantage from the information contained in this report while at the same time minimizing your analysis time and effort, we recommend you follow the step-by-step approach outlined below.

Step 1: Collect the Necessary Company Data

The first step in using this report is to gather all your financial and operating results for your 1985 fiscal year. Most of the needed data can be obtained from your company accounting records, but a small amount will have to be extracted from other sources, such as personnel files, advertising records and the like. If you participated in the 1986 P-H-C-P wholesaler Operating Performance Survey, this step has probably already been done.

Step 2: Calculate the Ratios

The second step is to compute all of the various performance measures for your firm that are included in this report using the data gathered in Step 1. It is extremely important to calculate these ratios using the same formulas which were used to produce the ratios in this report. These formulas, along with sample calculations of each measure, appear in the section of this report entitled, "Ratio Definitions and Sample Calculations," located in the Appendix.

Companies which participated in the survey and filled the survey form out completely received, absolutely free, a confidential computer printout of their own firm's financial ratios calculated and formatted in a manner that is consistent with the information in this report. Thus, for those firms, Step 2 has already been completed for them in an accurate, time saving manner. P-H-C-P wholesalers that did not participate in the 1986 survey should strongly consider doing so in the future.

Step 3: Compare the Results

Next, compare your company's performance with the survey results of other firms in the industry. As you do so, several points should be recognized:

(1) A deviation between your firm's figures (for any performance measure) and numbers in the report is not necessarily good or bad. It merely indicates that additional analysis may be required. As a rule, the larger the difference, the greater the need for further investigation.

(2) In situations where large deviations do exist, it may be helpful to go back and calculate the same performance measure over the past several years to identify any trends that may exist.

(3) The information in this report should be used as guidelines rather than absolute standards. Since firms differ as to their product emphasis strategy, location, size, and other factors, any two firms can be successful, yet have very different experiences with regard to certain performance measures.

Understanding the Data

In order to use the information in this report to maximum advantage, it is important to understand what the numbers mean and how to interpret them.

How The Tables Are Organized -- The tables in this report are organized to include a number of important financial ratios for each relevant "grouping" of similar firms. In particular, the major "groupings" used include:

- All Reporting Firms -- refers to the results of all firms responding to the survey.
- Product Emphasis Group:
    - Plumbing Supplies & Equipment Firms -- those firms that derive over 50% of sales from plumbing products.
    - Industrial P-V-F Firms -- those firms that derive over 50% of sales from Industrial P-V-F products.
    - Plumbing Supplies & Equipment and Industrial P-V-F Firms -- those firms that derive more than 50% of sales from plumbing and industrial P-V-F products combined but less than 50% from either category alone.
    - HVAC & Other Emphasis Firms -- those firms that cannot be classified in any of the above three groups; or those companies that derive less than 50% of sales from combined plumbing supplies and equipment, and industrial P-V-F.

- Product Emphasis Group by Sales Volume Size:
  - -- Plumbing Supplies and Equipment Firms with Sales Under $3 Million
  - -- Plumbing Supplies and Equipment Firms with Sales $3-7 Million
  - -- Plumbing Supplies and Equipment Firms with Sales $7-12 Million
  - -- Plumbing Supplies and Equipment Firms with Sales Over $12 Million

  - -- Industrial P-V-F Firms with Sales Under $4 Million
  - -- Industrial P-V-F Firms with Sales $4-12 Million
  - -- Industrial P-V-F Firms with Sales Over $12 Million

  - -- Plumbing Supplies & Equipment and Industrial P-V-F Firms with Sales Under $3 Million
  - -- Plumbing Supplies & Equipment and Industrial P-V-F Firms with Sales $3-7 Million
  - -- Plumbing Supplies & Equipment and Industrial P-V-F Firms with Sales Over $7 Million

  - -- HVAC & Other Emphasis Firms with Sales Under $3 Million
  - -- HVAC & Other Emphasis Firms with Sales $3-8 Million
  - -- HVAC & Other Emphasis Firms with Sales Over $8 Million

- By Geographic Region:
  - -- New England (CT, ME, MA, NH, RI, VT)
  - -- New York (excluding NYC)
  - -- Long Island and Metro NYC (however, data was insufficient to include ratios in this report)
  - -- Middle Atlantic (DE, Eastern PA, MD, NJ, DC)
  - -- East Central (IN, OH, Western PA, WV)
  - -- Southern (AL, FL, GA, KY, MS, NC SC, TN, VA)
  - -- Michigan (excluding Upper MI)
  - -- Metro Chicago and Northern IL
  - -- Mid-America (IA, Southern IL, KS, MN, MO, NE, ND, SD, Upper MI, WI)
  - -- Louisiana, Texas, New Mexico, Oklahoma and Arkansas
  - -- Rocky Mountain (CO, ID, MT, UT, WY)
  - -- Pacific Northwest (AK, OR, WA)
  - -- Northern California, Northern Nevada, and Hawaii
  - -- Pacific Southwest (AZ, Southern CA, Southern NV)

- By Product Emphasis Group by High Profit Firms:
  - -- High Profit Plumbing Supplies & Equipment Firms
  - -- High Profit Industrial P-V-F Firms
  - -- High Profit Plumbing Supplies & Equipment and Industrial P-V-F Firms
  - -- High Profit HVAC & Other Emphasis Firms

Interpreting the Numbers -- Most of the performance indicators included in this study are reported on the basis of medians rather than arithmetical averages or means. Unlike the mean, the median is not distorted by a few unusually high or low values that may exist in the sample due to special circumstances. The "median" figure represents the mid-point of the figures for a particular measure, with one-half of the firms reporting figures above it and one-half below. Each median was independently selected from its own array of figures. As a result, *component figures of an item may not necessarily total 100 percent and normal mathematical relationships do not always exist.* For example, the median net sales minus the median cost of goods sold may not necessarily equal the median gross margin percent.

Also included for most of the performance indicators is the "Middle Range." This represents the experience of the middle 50 percent of all firms in the data grouping when items are arranged numerically from lowest to highest. In other words, the upper and lower limits on the "Middle Range" are simply the upper and lower quartiles respectively for that ratio.

LOWER 25% OF REPORTED FIGURES	MIDDLE 50% OF REPORTED FIGURES (OR MIDDLE RANGE)	**UPPER 25% OF REPORTED FIGURES**

▲
MEDIAN FIGURE

MEDIAN FIGURE

Further insights into how to use this report are included in the Appendix in the section entitled: "Ratio Definitions and Sample Calculations." An important point to keep in mind when using this report is that even relatively simple analysis of your company's own financials using the industry data for comparison, can yield important insights into your business. You do not have to be a financial expert to benefit from this information.

1986 ASA OPERATING PERFORMANCE SURVEY DETAILED RESULTS

Executive Summary of Survey Results

As in past years, this 1986 ASA Operating Performance Report (for the PHCP Wholesale/Distribution and PVF Distributing Industries) provides an easily referenced set of detailed tables of industry performance. These are found on pages 35 through 155 of this report and are organized into four primary sections, one for each major product emphasis group, including: (1) Plumbing Supplies and Equipment firms; (2) Industrial P-V-F firms; (3) Plumbing Supplies & Industrial P-V-F firms; and (4) HVAC & Other firms. Any given wholesaler can use these detailed tables for reference from time-to-time by simply referring to the section which most closely corresponds to their own operation.

While the detailed tables included in this report are designed to provide and be used as a reference tool, many insights can be drawn from this information regarding industry performance characteristics experienced in 1985. Of greatest benefit is to compare the 1985 industry results to that achieved in prior years in order to identify any trends that may have occured. This is important for understanding not only where the industry has been, but it is an invaluable input for anticipating which direction it is likely to go in the future. Some highlights of these results are provided below as well as some insights regarding what can be learned from the 1981 - 85 period.

1981-1985 Performance Comparison--Learning from Past Experiences

Essentially the five years from 1981 through 1985 can best be described as a time of cyclical performance in the overall economy as well as in P-H-C-P wholesaling. Over this period both the economy and the industry have experienced a transition from severe recession (1981-1982) to rapid recovery (1983-84) to sustained, but slower, business expansion (1985). While the bitter memories of the 1981-82 recession have long ago been forgotten, it is important not to forget the lessons learned.

It was a time when many P-H-C-P wholesalers struggled for survival.

- Sales volume for the "typical" firm declined (as reflected by a negative 4.3% sales change in 1982 versus 1981 for respondents to the ASA survey).

- Profits were at a five year low (as profit margins in 1982 were only 1.1% of sales for the "typical" ASA respondent).

- Inventory turnover was only 3.6 times in 1982, the lowest performance of the five year period 1981-85.

- Virtually every other measure of performance was down.

As in any economic recession many P-H-C-P wholesalers in 1981-82 were forced to adopt a number of strategies aimed at alleviating costs and cash flow pressures. These included such survival tactics as:

- cutting unnecessary expenses
- trimming excess inventories
- eliminating unprofitable product categories
- laying off non-key employees
- speeding up billing procedures
- and various others

Fortunately, the economy eventually recovered and so did the P-H-C-P wholesaling industry. But, unfortunately, the inevitable fact is that the economy is cyclical and will always be cyclical. Throughout this century there has inevitably been numerous periods of strong growth, followed by periods of decline (or recession), followed by eventual periods of recovery and expansion. Given this pattern, it is safe to suggest that sometime in the not-to-distant future there is a "recession lurking". When that might occur is anyone's guess (and certainly most economists have an opinion on the subject). However, the fact that the economy has undergone a period of expansion for several years suggests that the next economic downturn is getting progressively closer.

Recognizing that a recession will eventually occur, now is the time to prepare. While the timing of when the next recession will occur is difficult to anticipate, its impact on your business can be softened if you avoid a couple potential pitfalls:

- Avoid the tendency of "loosening the reigns" too much. When times are good, many firms are not as expense-conscious and control-oriented as during recessionary periods. As a result, very often inefficiencies develop that go unnoticed until business conditions turn downward.

- Avoid a "let's not rock the boat" attitude that can easily occur when times are good. Rather, there is no better time to improve your business operations than when cash is available, interest rates are low and the company is financially strong.

In a larger sense, the pitfalls listed above suggest that sound business management and control procedures--regardless of economic climate--are critical for success. Businesses that closely control their operations during any economic climate really do not have to react differently during recessions. While sales and profits during poor economic times may be below that which is experienced during good times, the well managed company's goal is to experience the maximum performance possible at the time.

If your company tends to "loosen the belt" during good times (i.e. not monitor costs, cash flow, inventory movement etc. as during recessionary periods), chances are you are significantly and adversely affected by economic downturns. If so, start preparing for the next recession today. It will never come at a good time.

1981-1985 Performance Comparison--Key Performance Measures

Exhibit 8 shows the impact that swings in the business cycle have had on P-H-C-P wholesalers over the past five years based on a number of key performance indicators.

Productivity Management -- For any P-H-C-P wholesaler, an important determinant of profitability is the efficiency or productivity with which the company operates. As a general rule, the companies that are the most profitable each year are those that are also the most productive. This relationship tends to be true regardless of company size, type of product emphasis, geographic area, or economic conditions.

The particular productivity components for P-H-C-P wholesalers that tend to be most important are inventory and personnel. For the typical industry firm, payroll costs are one of the highest expense elements, representing 13.5% of net sales; and inventory, is by far, the largest asset investment item (representing 47.5% of total assets).

Based on ASA survey results for the 1981 - 85 period, several noteworthy trends can be identified:

- Payroll and fringe benefits costs as a percentage of net sales have slowly, but steadily declined in each of the past four years for the typical firm in the industry, going from 14.5% in 1982 to 14.1% in 1983 to 13.7% in 1984 and to 13.5% in 1985. This same pattern is true of Plumbing Supplies & Equipment firms, as well as HVAC & Other Emphasis firms. However, Industrial P-V-F firms experienced the opposite pattern, as payroll and fringe benefits costs have increased steadily, and significantly as a percentage of sales every year since 1981.

- Sales per employee for the typical industry firm has steadily increased since 1982, from $152,258 in 1982, to $167,380 in 1983, to $186,131 in 1984, and $187,024 last year. A generally strong uptrend has occurred in this regard for each of the four product emphasis groups shown in Exhibit 8.

- Virtually all of the inventory productivity measures shown in Exhibit 8 for the "All Firms" group have essentially stayed consistent over the years (although some fluctuation has occurred from time to time). For example, gross margin as a percent of sales for the typical industry firm was 24.9% in 1985 as compared to 24.7% in 1981; cost of warehouse goods sold to average inventory was 3.4 times in both years; total cost of goods sold to average inventory went from 3.8 times in 1981 to 4.0 times in 1985; warehouse gross margin return on inventory held steady at 120% in 1985 versus 119% in 1981. However, among the four product specialty groups a more mixed pattern of performance exists. For example, Plumbing Supplies and Equipment firms have shown a five-year decline in warehouse gross margin return on inventory, while Industrial P-V-F firms have trended upward.

EXHIBIT 8
P-H-C-P WHOLESALERS FIVE-YEAR SUMMARY PERFORMANCE COMPARISON
1981-1985

	Plumbing Supplies & Equipment Firms					Industrial P-V-F Firms				
	1985	1984	1983	1982	1981	1985	1984	1983	1982	1981
Financial Management										
Total Debt to Net Worth	92.8%	90.7%	85.8%	68.9%	78.1%	84.1%	74.4%	83.9%	83.3%	64.2%
Current Assets Minus Inventory to Current Debt	1.0x	1.0x	1.0x	1.3x	1.1x	1.0x	1.1x	1.1x	1.2x	1.0x
Personnel Productivity										
Net Sales per Employee	$195,342	$189,182	$171,166	$158,548	$162,470	$218,040	$197,975	$196,923	$201,377	$198,150
Payroll and Fringe Benefits to Net Sales	13.2%	13.5%	13.7%	14.1%	13.8%	15.9%	14.4%	14.1%	13.9%	12.9%
Inventory Management										
Gross Margin on Sales	24.3%	24.3%	24.3%	25.0%	24.4%	27.1%	25.7%	24.4%	23.4%	25.1%
Cost of Warehouse Goods Sold to Average Inventory	3.7x	3.8x	3.7x	3.3x	3.5x	3.3x	3.2x	3.1x	2.7x	3.0x
Total Cost of Goods Sold to Average Inventory	4.0x	4.2x	4.1x	3.7x	4.2x	4.1x	4.2x	3.6x	3.7x	3.4x
Warehouse Gross Margin Return on Inventory	118%	126%	124%	113%	127%	127%	121%	109%	95%	111%
Accounts Receivable										
Average Collection Period (Days)	48	49	50	50	44	43	48	51	40	40
Expense Management										
Total Operating Expenses as a Percent of Sales	21.4%	21.3%	21.8%	22.7%	21.6%	23.1%	22.2%	23.6%	22.0%	20.6%
Sales Performance										
Percent Sales Change from Prior Year	9.8%	14.7%	18.1%	-3.1%	0.5%	9.5%	20.1%	-6.8%	-11.7%	3.6%

EXHIBIT 8 (continued)
P-H-C-P WHOLESALERS FIVE-YEAR
SUMMARY PERFORMANCE COMPARISON
1981-1985

	Plumbing Supplies & Equipment & Industrial P-V-F Firms					HVAC & Other Emphasis Firms					All Reporting Firms				
	1985	1984	1983	1982	1981	1985	1984	1983	1982	1981	1985	1984	1983	1982	1981
Financial Management															
Total Debt to Net Worth	79.9%	61.7%	56.7%	42.5%	52.3%	78.9%	83.8%	87.1%	92.7%	102.1%	88.0%	82.7%	78.4%	68.3%	74.1%
Current Assets Minus Inventory to Current Debt	1.2x	1.3x	1.4x	1.5x	1.4x	1.0x	1.0x	1.0x	1.1x	1.0x	1.1x	1.1x	1.1x	1.3x	1.1x
Personnel Productivity															
Net Sales per Employee	$191,210	$191,422	$167,513	$152,807	$157,900	$166,551	$164,970	$144,910	$135,715	$133,470	$187,024	$186,131	$167,380	$152,258	$162,040
Payroll and Fringe Benefits to Net Sales	14.2%	13.7%	14.3%	15.3%	14.2%	12.7%	13.9%	14.3%	15.1%	15.6%	13.5%	13.7%	14.1%	14.5%	14.1%
Inventory Management															
Gross Margin on Sales	24.8%	23.7%	24.1%	25.2%	24.5%	25.2%	24.9%	26.2%	26.1%	26.1%	24.9%	24.5%	24.8%	25.0%	24.7%
Cost of Warehouse Goods Sold to Average Inventory	3.7x	3.4x	3.4x	2.8x	3.1x	3.1x	3.3x	2.8x	3.3x	3.1x	3.4x	3.6x	3.3x	3.1x	3.4x
Total Cost of Goods Sold to Average Inventory	4.5x	4.1x	4.0x	3.6x	3.9x	3.4x	3.9x	3.4x	3.4x	3.5x	4.0x	4.1x	3.8x	3.6x	3.8x
Warehouse Gross Margin Return on Inventory	127%	111%	108%	106%	114%	109%	118%	102%	111%	118%	120%	123%	114%	109%	119%
Accounts Receivable															
Average Collection Period (Days)	51	48	49	46	47	46	46	49	50	43	47	48	50	47	44
Expense Management															
Total Operating Expenses as a Percent of Sales	21.7%	21.3%	22.7%	24.7%	21.2%	22.9%	22.3%	23.5%	25.1%	23.5%	21.9%	21.5%	22.4%	23.2%	21.7%
Sales Performance															
Percent Sales Change from Prior Year	7.3%	14.2%	12.7%	-3.7%	2.8%	7.9%	14.6%	7.8%	-3.7%	-0.8%	8.3%	15.2%	10.5%	-4.3%	0.9%

Accounts Receivable -- Another important aspect of a wholesaler's business is the extent to which customers pay on time. During 1985, "average collection period" (or days outstanding in receivables, as it is sometimes called) was 47 days for the typical company responding to the ASA survey. This measure ranged from a low of 43 days for the Industrial P-V-F firms group, to 51 days for the Plumbing Supplies & Equipment & Industrial P-V-F firms group.

The importance of receivables management tends to be overlooked somewhat during strong economic times because during such periods, most customers generally pay promptly, cash flow is usually strong, sales and profits are usually up and interest rates are generally moderate. However, when a recession hits, firms that do not adequately manage their receivables discover the effects very quickly. In effect, everything reverses -- cash flow becomes strained, interest rates increase, and customers stretch their payments. As a result, quite often companies that are otherwise successful and profitable, face severe financial hardship, simply because the funds to which they are entitled are not promptly collectable.

The secret to successful receivables management, therefore, is to follow sound procedures and guidelines for controlling receivables regardless of the economic situation. To assist the industry in this regard, ASA has recently published a special study titled "Credit and Collections--Establishing an Effective System". This easy-to-understand and use guidebook provides a step-by-step procedure for granting credit, controlling receivables and getting action on slow or seemingly uncollectabe accounts.

Fortunately, 1985 was a time of prosperity in the economy and among P-H-C-P wholesalers. As a result, accounts receivable did not represent any significant problems in the overall industry. However, any given wholesaler should compare their own firm's performance versus the industry norms published here in order to detect any possible improvement opportunities. A good summary of accounts receivable aging information is provided in Exhibit 9 for 1985, which shows the percentage of total receivables that are:

- Current (0-30 days since the invoice date)
- 31-60 days since the invoice date
- 61-90 days since the invoice date
- Over 90 days since the invoice date

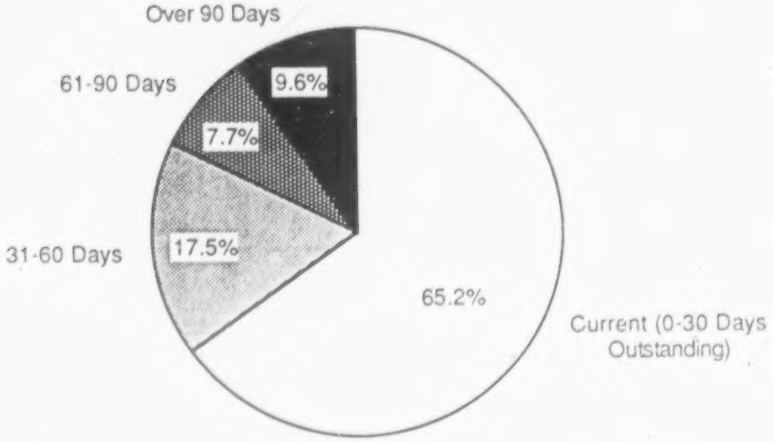
As shown in Exhibit 9, the typical P-H-C-P wholesaler in 1985 , had 65.2% of receivables that were current (0-30 days since the invoice date); 17.5% that were 31-60 days since the invoice date; 7.7% that were 61-90 days since the invoice date; and 9.6% that were over 90 days outstanding.

Financial Management -- For a guage of financial strength, the most important factors to consider are leverage and liquidity. Essentially, leverage refers to the degree to which a firm relies on creditors funds (debt) to finance part of the business (the other part is financed through the owner's equity in the business). Liquidity refers to a firm's ability to meet its current debt obligations. These are the factors usually used by bankers in deciding whether or not to grant lines of credit or to approve loans.

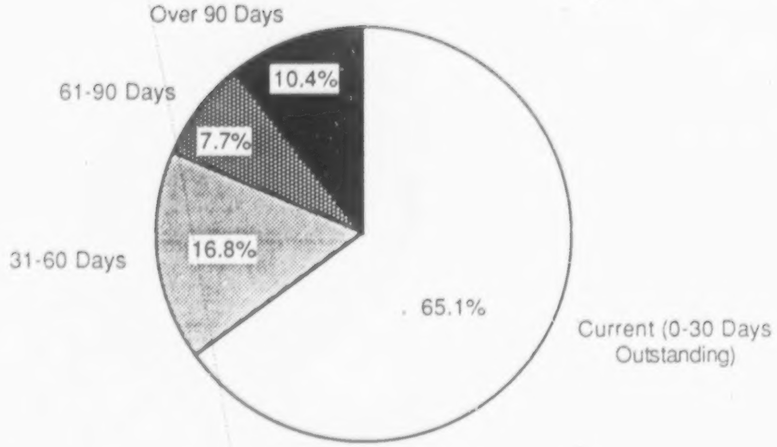
Exhibit 9

ACCOUNTS RECEIVABLE AGING -- 1985

(Percentage of Accounts Receivable Dollars Current and Past Due)



ALL REPORTING FIRMS

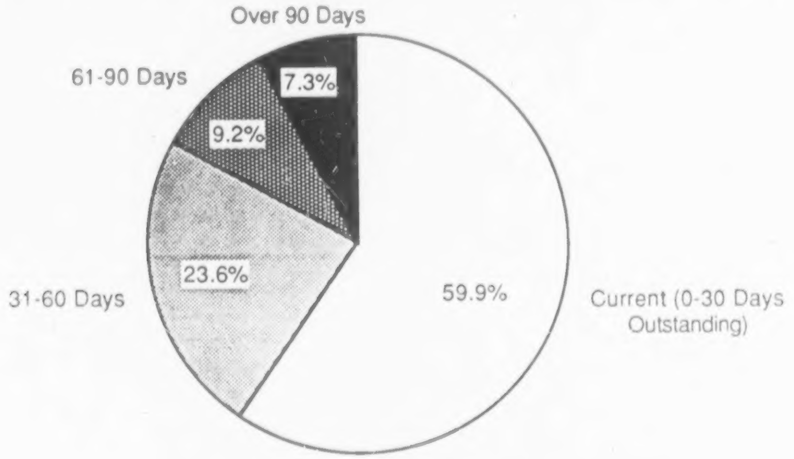


PLUMBING SUPPLIES & EQUIPMENT FIRMS

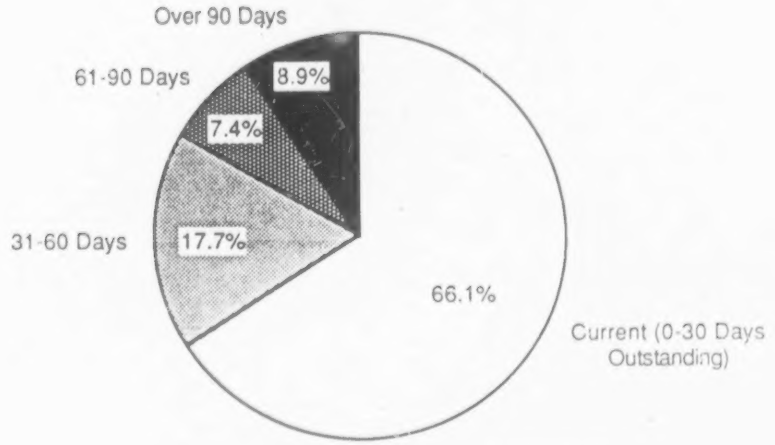
Exhibit 9 (continued)

ACCOUNTS RECEIVABLE AGING -- 1985

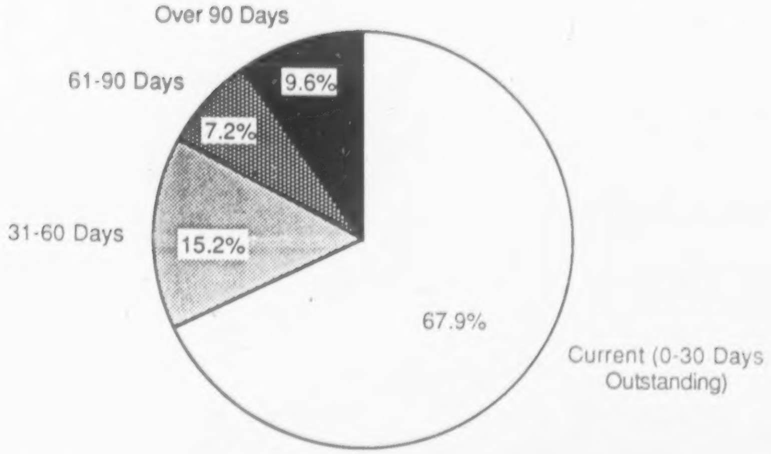
(Percentage of Accounts Receivable Dollars Current and Past Due)



INDUSTRIAL P-V-F FIRMS



PLUMBING SUPPLIES & EQUIPMENT AND INDUSTRIAL P-V-F FIRMS



HVAC & OTHER EMPHASIS FIRMS

Exhibit 8 highlights two key measures of financial strength: "total debt to net worth" (a measure of leverage); and current assets minus inventory to current debt" (a measure of liquidity). While liquidity has remained fairly constant for the typical industry firm over the years 1981-85, leverage has fluctuated throughout the period (from a total debt to net worth low of 68.3% in 1982, up to 88.0% in 1985).

Expense and Profit Trends -- For most firms, expense and margin management receives the majority of regular managerial attention. These operating components are unquestionably the most often measured and scrutinized components of the business. Owners and managers receive regular income statement (or profit and loss statement) results about their business, and as a result, watching and controlling expenses and margins is oftentimes foremost in their minds.

Exhibit 10 graphically shows P-H-C-P wholesaler expense and margin trends (as a percentage of sales) over the past five years. Several important observations can be made:

- For the third consecutive year, Plumbing Supplies & Equipment firms in 1985 reported the highest net profit margin (after tax) among the four product emphasis groups. However, very little difference existed between the four groups in terms of the profit margin experienced, with all four ranging between 1.5 and 1.7%.

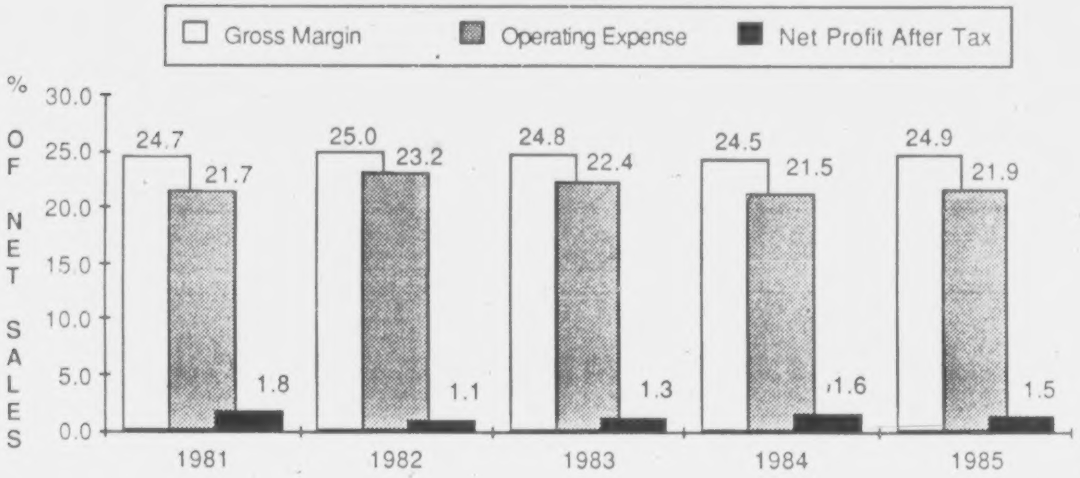
- Over the five year period from 1981 through 1985, gross margin levels have remained fairly constant (at just under 25% of sales) for the "typical" firm in the industry. However, a notable increase has occurred ever since 1982 for Industrial P-V-F firms (from 23.4% in 1982 to 27.1% in 1985).

- While gross margin levels were highest for Industrial P-V-F firms, this product emphasis group also experienced the highest operating expenses relative to sales (23.1%).

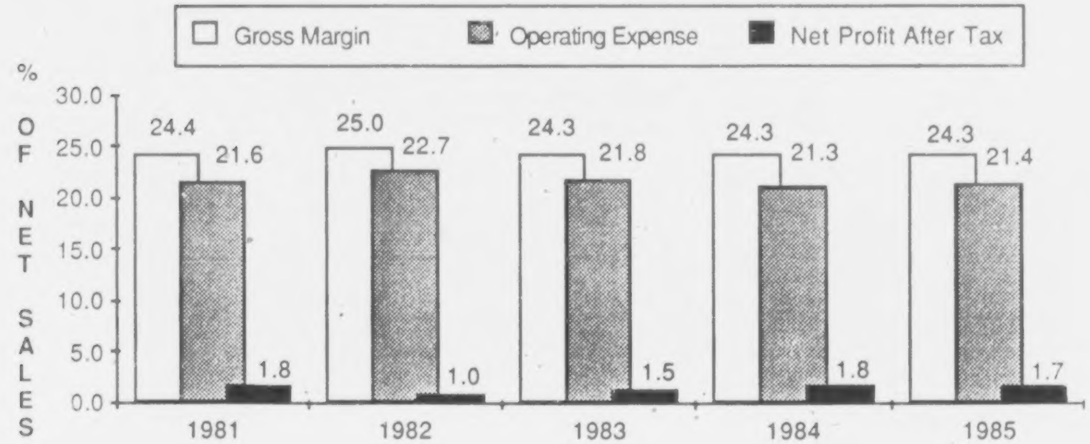
Sales Performance-- In addition to five year trend results in the areas of productivity, financial strength, receivables management, and expense management, Exhibit 8 also shows the annual percentage increases in sales. For the third consecutive year, the typical respondent to the ASA survey showed a respectable increase (reporting an 8.3% advance in 1985 versus 1984).

Additional insights into the particular make-up of P-H-C-P wholesaler sales is provided in Exhibit 11 below, which shows the mix of sales by type of sales transaction as well as the mix of sales by type of product sold. Each of these is shown for the "all reporting firms" group as well as for each of the four product emphasis groups.

Exhibit 10

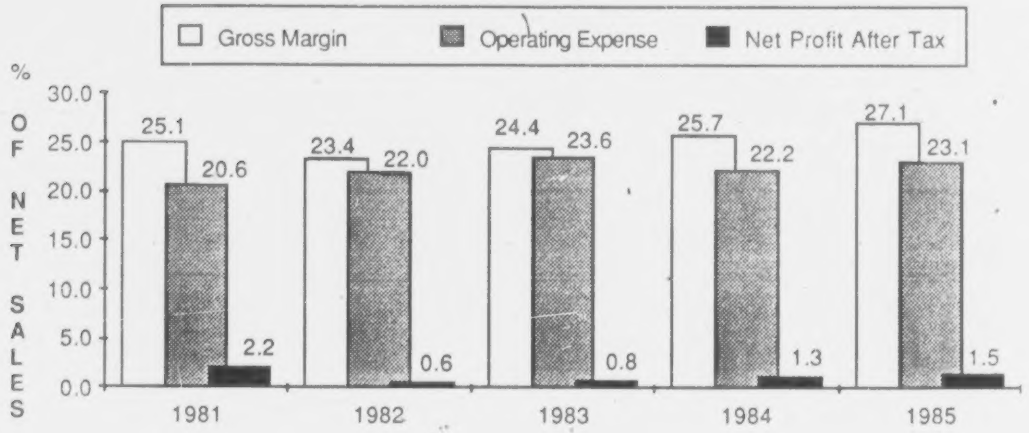


ALL P-H-C-P WHOLESALER FIVE YEAR EXPENSE & PROFIT TRENDS (1981 - 1985)

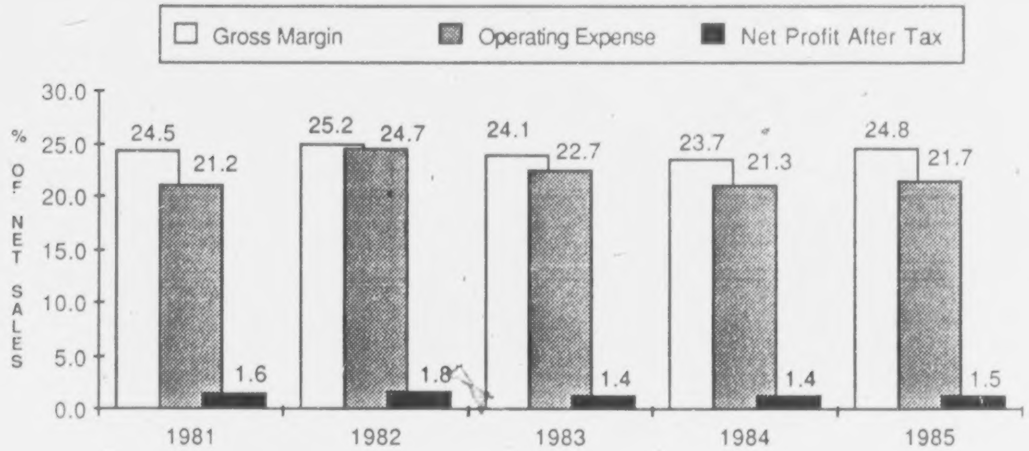


PLUMBING SUPPLIES & EQUIPMENT FIRMS FIVE YEAR EXPENSE & PROFIT TRENDS (1981 - 1985)

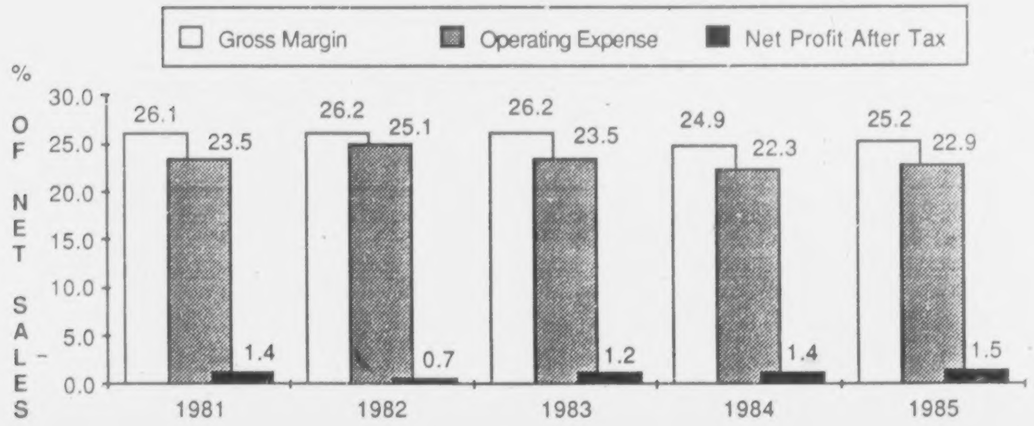
Exhibit 10 (continued)



INDUSTRIAL P-V-F FIRMS FIVE YEAR EXPENSE & PROFIT TRENDS (1981 - 1985)



PLUMBING SUPPLIES & EQUIP. & INDUS. P-V-F FIRMS FIVE YEAR EXPENSE & PROFIT TRENDS (1981 - 1985)

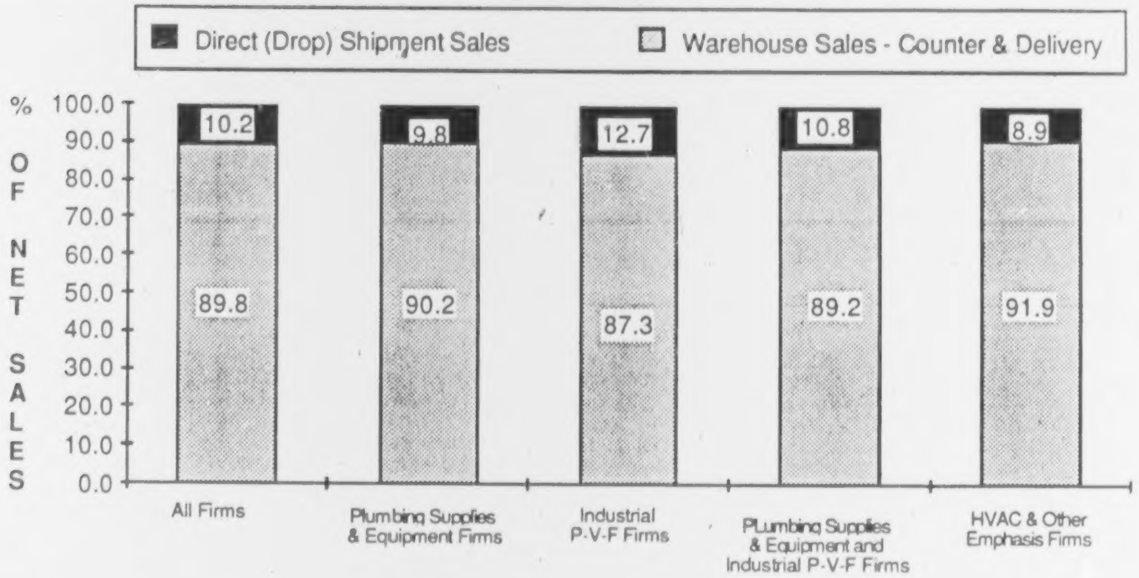


HVAC & OTHER EMPHASIS FIRMS FIVE YEAR EXPENSE & PROFIT TRENDS (1981 - 1985)

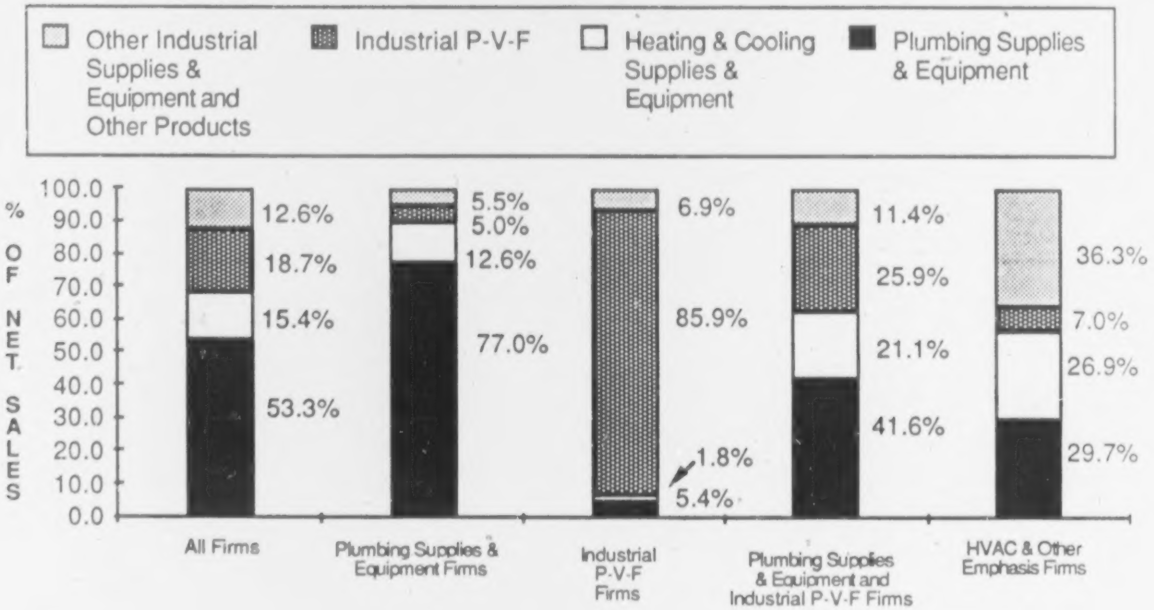
Exhibit 11

ANALYSIS OF 1985 P-H-C-P WHOLESALER SALES

SALES MIX



PRODUCT MIX



1985 vs. 1984 Profitability Comparison

Each year's ASA Operating Performance Report contains a special analysis showing industry profitability based on "return on net worth". This single measure essentially summarizes all the key components of profitability: margin management, asset management and financial policy management.

Exhibit 12 reflects the 1985 and 1984 return on net worth performance of P-H-C-P wholesalers as well as the combined impact of each of the three "profit pathways".

- Profit Margin refers to net profit (after tax) divided by net sales. It is a good measure of margin management because in order to achieve an acceptable net profit margin, a company must earn an acceptable gross margin while keeping expenses in line.

- Asset Turnover depicts net sales divided by total assets. This is an overall measure of asset management, showing how many dollars in sales are being generated by each dollar of assets employed in running the business.

- Financial Leverage is derived from total assets divided by net worth. Financial leverage is nothing more than the degree to which debt is used to finance the business as opposed to net worth (owner's investment).

Since the above three components multiply together to yield return on net worth, increases in any of these three components increases the overall profitability of the firm. Unfortunately, the opposite is also true.

Based upon the profit models shown in Exhibit 12 for the various types of P-H-C-P wholesalers, several insights are especially noteworthy:

- Overall, 1985 was similar in profitability to 1984 for the typical ASA survey respondent. Return on net worth for the "All Reporting Firms" group improved only slightly (from 8.2% in 1984 to 8.8% in 1985).

- While both the Plumbing Supplies & Equipment firm group and the HVAC & Other Emphasis firm group experienced virtually unchanged profitability performance in 1985 versus 1984, larger shifts occurred for the other two groups. In particular, Industrial P-V-F firms improved from a 5.7% return on net worth in 1984 to 8.3% in 1985. Meanwhile, the "Plumbing Supplies & Equipment and Industrial P-V-F" firms group slipped somewhat (from a 7.8% return on net worth in 1984 to 6.6% in 1985).

High Profit Firms vs. the "Typical" Firm

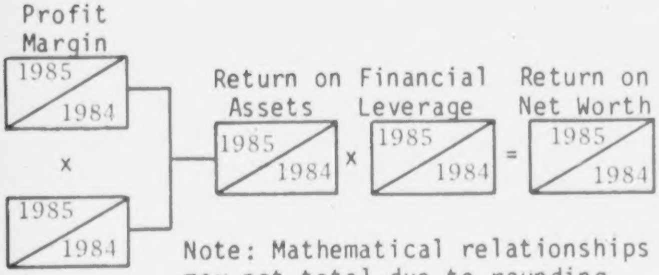
Perhaps the most enlightening insights provided in each year's ASA Operating Performance Report came from the detailed performance results for the "High Profit" firms of the industry. Essentially, this is a special data grouping that is done each year for the most profitable companies (on the

Exhibit 12

P-H-C-P WHOLESALER TWO-YEAR STRATEGIC PROFIT MODEL RATIOS

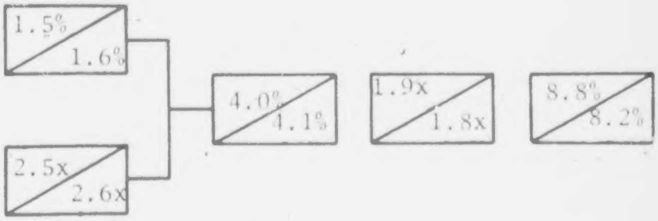
1985 vs. 1984

HOW TO INTERPRET

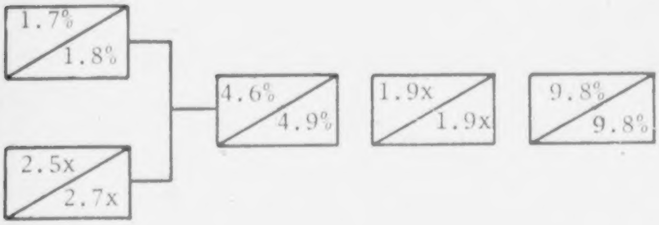


Note: Mathematical relationships may not total due to rounding.

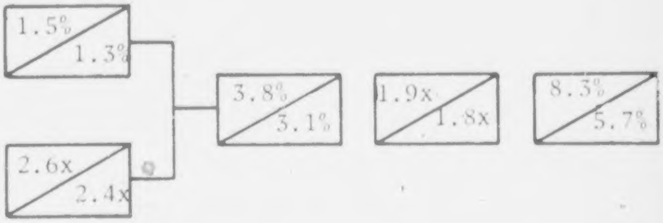
ALL REPORTING FIRMS



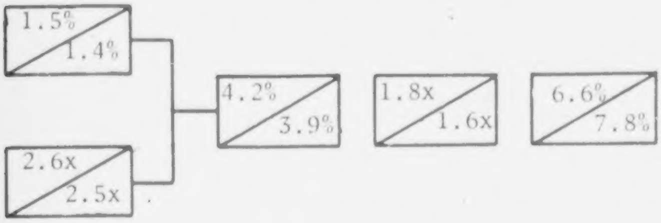
PLUMBING SUPPLIES & EQUIPMENT FIRMS



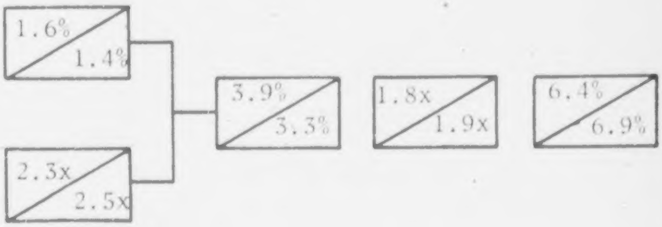
INDUSTRIAL P-V-F FIRMS



PLUMBING SUPPLIES & EQUIPMENT AND INDUSTRIAL P-V-F FIRMS



HVAC & OTHER EMPHASIS FIRMS



basis of before tax return on assets). Since high profitability is a primary goal of most P-H-C-P wholesalers, important insights can be gained by understanding what characterizes the most profitable firms. Exhibit 13 below is a summary of the key indicators of profitability, showing the results of the "High Profit firms" as compared to the "typical" or median firm. In particular:

- The High Profit firms experienced substantially higher inventory productivity than did other firms in the industry, due mostly to superior inventory turnover levels. Also warehouse gross margin return on inventory (a key overall measure of inventory productivity) is much higher for the High Profit firms in each of the four product emphasis groups shown in Exhibit 13.

- High Profit firms were less heavily leveraged than other firms in the industry (as measured by total debt to net worth) and had a somewhat stronger liquidity position (as measured by current assets to current debt). These patterns were true regardless of product emphasis group.

- The 1985 personnel productivity performance results, as measured by net sales per employee, strongly favored the high profit companies. Likewise, the high profit firms reported lower payroll and fringe benefits cost relative to sales.

EXHIBIT 13
SUMMARY PERFORMANCE COMPARISON--
HIGH PROFIT FIRMS VS. "TYPICAL FIRM"
P-H-C-P WHOLESALERS 1985

	Plumbing Supplies & Equipment Firms		Industrial P-V-F Firms		Plumbing Supplies & Equipment & Industrial P-V-F Firms		HVAC & Other Emphasis Firms		All Reporting Firms
	Typical	High Profit	Typical	High Profit	Typical	High Profit	Typical	High Profit	
Profitability									
Net Profit (After Tax) to Total Assets	4.6%	7.3%	3.8%	6.4%	4.2%	7.6%	3.9%	5.1%	4.0%
Net Prifit (After Tax) to Net Worth	9.8%	14.4%	8.3%	12.2%	6.6%	10.2%	6.4%	9.4%	8.8%
Net Profit (After Tax) to Net Sales	1.7%	2.7%	1.5%	2.6%	1.5%	2.4%	1.6%	2.2%	1.5%
Asset and Financial Management									
Net Sales to Total Assets	2.5x	2.7x	2.6x	2.6x	2.6x	2.7x	2.3x	2.4x	2.5x
Total Debt to Net Worth	92.8%	80.5%	84.1%	75.7%	79.9%	64.8%	78.9%	75.7%	88.0%
Current Assets to Current Debt	2.5x	2.6x	2.3x	2.4x	2.4x	3.0x	2.8x	2.9x	2.5x
Personnel Productivity									
Net Sales per Employee	$195,342	$230,899	$218,040	$249,307	$191,710	$210,176	$166,551	$184,231	$187,024
Payroll and Fringe Benefits to Net Sales	13.2%	12.6%	15.9%	15.3%	14.2%	13.4%	12.7%	12.4%	13.5%
Inventory Management									
Gross Margin on Net Sales	24.3%	24.3%	27.1%	29.3%	24.8%	24.7%	25.2%	26.4%	24.9%
Gross Margin on Direct Shipments	10.1%	9.6%	12.2%	12.4%	12.4%	13.8%	13.3%	13.4%	11.7%
Gross Margin on Warehouse Sales	25.1%	25.2%	27.6%	28.7%	24.8%	24.6%	25.1%	26.0%	25.1%
Cost of Warehouse Goods Sold to Average Inventory	3.7x	3.9x	3.3x	3.3x	3.7x	4.4x	3.1x	3.3x	3.4x
Total Cost of Goods Sold to Average Inventory	4.0x	4.5x	4.1x	4.0x	4.5x	5.8x	3.4x	3.7x	4.0x
Warehouse Gross Margin Return on Average Inventory	118%	136%	127%	136%	127%	151%	109%	116%	120%
Accounts Receivable									
Average Collection Period (Days)	48	47	43	44	51	53	46	47	47
Operating Expenses (% of Net Sales)									
Selling Expenses	5.5%	4.9%	7.3%	6.6%	6.5%	5.1%	6.2%	6.1%	6.3%
Delivery Expense	2.0%	2.0%	2.3%	2.7%	1.7%	1.9%	1.7%	1.8%	1.8%
Warehouse Expenses	2.5%	2.6%	2.9%	2.9%	2.9%	2.8%	2.3%	2.3%	2.6%
General & Administrative Expenses	8.1%	7.9%	8.4%	8.6%	9.2%	9.2%	9.5%	9.8%	8.6%
Occupancy Expenses	1.7%	1.5%	1.3%	1.4%	1.7%	1.4%	1.7%	1.9%	1.6%
Total Operating Expenses	21.4%	19.5%	23.1%	23.2%	21.7%	20.6%	22.9%	22.8%	21.9%
Sales Performance									
Percent Sales Change from Prior Year	9.8%	16.6%	9.5%	11.1%	7.3%	9.0%	7.9%	7.9%	8.3%

Plumbing Supplies & Equipment Firms

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

PLUMBING SUPPLIES & EQUIPMENT FIRMS

	TYPICAL	MIDDLE RANGE
OVERALL PERFORMANCE		
Net Profit After Tax to Net Worth	9.80%	4.08 - 15.69%
Total Assets to Net Worth	1.93X	1.49 - 3.39X
Net Profit After Tax to Total Assets	4.57%	2.25 - 6.95%
Net Sales to Total Assets	2.53X	2.11 - 3.07X
Net Profit After Tax to Net Sales	1.70%	0.90 - 2.70%
Net Profit Before Tax to Net Worth	13.98%	5.64 - 23.78%
Net Profit Before Tax to Total Assets	5.96%	3.20 - 10.89%
EBIT to Total Assets	9.00%	5.08 - 12.29%
SALES ANALYSIS		
Net Sales ($000)	$4,960	$2,558 - 10,954
Percent Sales Change from Prior Year	9.76%	-1.19 - 20.27%
Sales Mix:		
Direct Sales	9.8%	2.7 - 14.4%
Warehouse Sales - Counter and Delivery	90.2%	85.6 - 97.3%
TOTAL SALES	100.0%	100.0 - 100.0%
PRODUCT SALES MIX		
Plumbing Supplies & Equipment	77.0%	62.0 - 95.0%
Heating & Cooling Supplies & Equipment	12.6%	0.0 - 23.8%
Industrial P-V-F (Pipes-Valves-Fittings)	5.0%	0.0 - 5.0%
Other Industrial Supplies & Equipment	1.3%	1.3 - 0.0%
Other Products	4.2%	0.0 - 5.0%
TOTAL SALES	100.0%	100.0 - 100.0%
GROSS MARGIN		
Gross Margin on Net Sales	24.3%	21.3 - 26.4%
Gross Margin on Direct Shipments	10.1%	8.3 - 14.7%
Gross Margin on Warehouse Sales	25.1%	22.7 - 27.6%
ASSET AND FINANCIAL MANAGEMENT		
Current Asset Turn (Sales/Current Assets)	2.90X	2.47 - 3.43X
Total Debt to Net Worth	92.8%	48.5 - 237.9%
Current Debt to Net Worth	67.9%	38.9 - 174.9%
Current Assets to Current Debt	2.50X	1.65 - 3.35X
Current Assets Minus Inventory/Curr Debt	1.01X	0.71 - 1.63X
INVOICE/TRANSACTION DATA		
Billing Lines Per Invoice	6.0	4.5 - 8.0
Average Invoice Size	$152	$105 - 229
Average Billing Line	$28.03	$18.74 - 39.65

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

PLUMBING SUPPLIES & EQUIPMENT FIRMS

	TYPICAL	MIDDLE RANGE
PERSONNEL PRODUCTIVITY		
Sales Per Employee	$195,342	$156,330 - 248,739
Gross Margin Per Employee	$46,365	$37,550 - 59,784
Average Compensation Per Employee	$22,614	$19,353 - 26,012
Average Fringe Benefits Per Employee	$4,155	$2,889 - 5,327
Compensation & Fringes Per Employee	$26,957	$22,160 - 31,678
Payroll to Net Sales	11.4%	9.9 - 13.3%
Fringe Benefits to Net Sales	2.0%	1.5 - 2.8%
Payroll & Fringes to Net Sales	13.2%	11.2 - 15.7%
Payroll to Gross Margin	48.7%	43.9 - 52.7%
Fringe Benefits to Gross Margin	8.2%	7.0 - 11.4%
Payroll & Fringes to Gross Margin	57.5%	50.6 - 62.0%
INVENTORY MANAGEMENT		
Cost of Whse Goods Sold to Ave Inventory	3.65X	2.74 - 4.69X
No. of Days Average Inventory Carried	100 Days	78 - 133 Days
Total Cost of Goods Sold to Ave Inventory	4.02X	3.05 - 5.56X
Whse Gross Margin Return on Ave Inventory	118%	98 - 154%
Turn & Earn Profitability Index	87%	70 - 113%
Percent of Firms on LIFO	48.99%	
ACCOUNTS RECEIVABLE		
Average Collection Period	48 Days	43 - 57 Days
Gross Margin Return on Receivables	177%	151 - 216%
Aging of Receivable Dollars:		
Current (0-30 Days Outstanding)	65.1%	56.6 - 72.9%
31-60 Days Outstanding	16.8%	12.6 - 20.9%
61-90 Days Outstanding	7.7%	4.6 - 9.7%
Over 90 Days Outstanding	10.4%	4.0 - 14.6%
Total	100.0%	100.0 - 100.0%
Average Account Balance:		
Current (0-30 Days Outstanding)	$1,188	$685 - 2,012
31-60 Days Outstanding	$1,196	$827 - 2,461
61-90 Days Outstanding	$1,279	$755 - 2,354
Over 90 Days Outstanding	$1,679	$926 - 2,886
Total	$1,316	$769 - 1,860
Aging of Receivable Accounts:		
Current (0-30 Days Outstanding)	70.0%	64.4 - 78.5%
31-60 Days Outstanding	15.9%	10.8 - 20.2%
61-90 Days Outstanding	7.1%	4.6 - 8.4%
Over 90 Days Outstanding	7.0%	4.1 - 8.3%
Total	100.0%	100.0 - 100.0%

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

PLUMBING SUPPLIES & EQUIPMENT FIRMS

	TYPICAL	MIDDLE RANGE
INCOME STATEMENT		
Net Sales	100.0%	100.0 - 100.0%
Cost of Goods Sold	76.1%	73.6 - 78.7%
Gross Margin	24.3%	21.3 - 26.4%
Operating Expenses:		
Selling Expenses	5.5%	4.3 - 7.1%
Delivery Expenses	2.0%	1.4 - 2.4%
Warehouse Expenses	2.5%	1.7 - 3.5%
General & Administrative Expenses	8.1%	6.3 - 10.5%
Occupancy Expenses	1.7%	1.2 - 2.5%
Other Operating Expenses	0.0%	0.0 - 0.4%
Total Operating Expenses	21.4%	18.7 - 23.8%
Net Operating Profit	2.5%	1.1 - 4.1%
Non-Operating Income	1.8%	0.9 - 2.5%
Non-Operating Expenses	1.6%	0.9 - 2.6%
Net Profit Before Tax	2.1%	1.1 - 4.3%
Net Profit After Tax	1.7%	0.9 - 2.7%
OPERATING EXPENSE CONTROL		
Total Operating Expense to Net Sales	21.4%	18.7 - 23.8%
Total Operating Expense to Gross Margin	89.5%	82.8 - 95.4%
Non-People Expense to Net Sales	7.3%	6.1 - 8.7%
Non-People Expense to Gross Margin	31.0%	26.2 - 35.8%
INTEREST EXPENSE		
Interest Expense to Net Sales	1.0%	0.4 - 1.7%
Times Interest Earned	2.9X	1.8 - 7.1X
BALANCE SHEET		
Cash	6.6%	0.8 - 11.0%
Accounts & Notes Receivable, Trade(Net)	31.1%	24.5 - 36.8%
Inventory	46.9%	41.4 - 56.1%
Other Current Assets	3.1%	0.4 - 3.1%
Total Current Assets	87.7%	84.1 - 94.5%
All Other Assets	12.3%	5.5 - 15.9%
Total Assets	100.0%	100.0 - 100.0%
Total Current Liabilities	37.3%	24.0 - 50.9%
Total Long-Term Liabilities	10.8%	1.6 - 15.1%
Total Liabilities	48.1%	31.4 - 69.8%
Total Net Worth	51.9%	30.2 - 68.6%
Total Liabilities & Net Worth	100.0%	100.0 - 100.0%

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

PLUMBING SUPPLIES & EQUIPMENT FIRMS -- SALES UNDER $3,000,000

	TYPICAL	MIDDLE RANGE
OVERALL PERFORMANCE		
Net Profit After Tax to Net Worth	9.81%	3.11 - 13.21%
Total Assets to Net Worth	1.76X	1.44 - 3.08X
Net Profit After Tax to Total Assets	5.38%	2.40 - 7.52%
Net Sales to Total Assets	2.38X	2.04 - 2.81X
Net Profit After Tax to Net Sales	2.00%	1.00 - 3.40%
Net Profit Before Tax to Net Worth	13.34%	4.40 - 21.36%
Net Profit Before Tax to Total Assets	6.53%	3.03 - 11.10%
EBIT to Total Assets	6.86%	3.76 - 12.13%
SALES ANALYSIS		
Net Sales($000)	$1,821	$1,328 - 2,439
Percent Sales Change from Prior Year	6.82%	-1.99 - 22.21%
Sales Mix:		
Direct Sales	5.8%	0.3 - 7.9%
Warehouse Sales - Counter and Delivery	94.2%	92.1 - 99.7%
TOTAL SALES	100.0%	100.0 - 100.0%
PRODUCT SALES MIX		
Plumbing Supplies & Equipment	80.1%	68.8 - 95.6%
Heating & Cooling Supplies & Equipment	9.4%	0.0 - 17.0%
Industrial P-V-F (Pipes-Valves-Fittings)	4.1%	0.0 - 5.5%
Other Industrial Supplies & Equipment	1.1%	0.0 - 1.1%
Other Products	5.3%	0.0 - 7.8%
TOTAL SALES	100.0%	100.0 - 100.0%
GROSS MARGIN		
Gross Margin on Net Sales	25.5%	22.0 - 28.7%
Gross Margin on Direct Shipments	9.0%	7.0 - 10.3%
Gross Margin on Warehouse Sales	25.9%	22.4 - 28.5%
ASSET AND FINANCIAL MANAGEMENT		
Current Asset Turn (Sales/Current Assets)	2.66X	2.25 - 3.09X
Total Debt to Net Worth	72.8%	43.2 - 184.9%
Current Debt to Net Worth	58.6%	36.2 - 145.8%
Current Assets to Current Debt	2.62X	1.81 - 4.12X
Current Assets Minus Inventory/Curr Debt	0.97X	0.70 - 1.83X
INVOICE/TRANSACTION DATA		
Billing Lines Per Invoice	6.0	5.0 - 10.0
Average Invoice Size	$127	$77 - 246
Average Billing Line	$22.38	$12.77 - 31.18

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

PLUMBING SUPPLIES & EQUIPMENT FIRMS -- SALES UNDER $3,000,000

	TYPICAL	MIDDLE RANGE
PERSONNEL PRODUCTIVITY		
Sales Per Employee	$154,675	$122,808 - 187,543
Gross Margin Per Employee	$37,787	$32,019 - 47,995
Average Compensation Per Employee	$18,818	$14,519 - 24,134
Average Fringe Benefits Per Employee	$3,152	$2,277 - 4,870
Compensation & Fringes Per Employee	$21,891	$17,394 - 28,167
Payroll to Net Sales	12.1%	10.2 - 14.2%
Fringe Benefits to Net Sales	2.2%	1.7 - 2.8%
Payroll & Fringes to Net Sales	14.2%	11.2 - 16.7%
Payroll to Gross Margin	48.3%	43.2 - 53.8%
Fringe Benefits to Gross Margin	8.1%	6.5 - 11.4%
Payroll & Fringes to Gross Margin	56.3%	47.0 - 62.7%
INVENTORY MANAGEMENT		
Cost of Whse Goods Sold to Ave Inventory	2.90X	2.50 - 4.49X
No. of Days Average Inventory Carried	126 Days	81 - 146 Days
Total Cost of Goods Sold to Ave Inventory	3.12X	2.67 - 4.97X
Whse Gross Margin Return on Ave Inventory	110%	87 - 156%
Turn & Earn Profitability Index	78%	64 - 110%
Percent of Firms on LIFO	30.00%	
ACCOUNTS RECEIVABLE		
Average Collection Period	46 Days	40 - 58 Days
Gross Margin Return on Receivables	194%	155 - 233%
Aging of Receivable Dollars:		
Current (0-30 Days Outstanding)	65.6%	50.0 - 77.9%
31-60 Days Outstanding	16.2%	10.8 - 20.3%
61-90 Days Outstanding	7.5%	2.4 - 10.6%
Over 90 Days Outstanding	10.7%	4.7 - 16.3%
Total	100.0%	100.0 - 100.0%
Average Account Balance:		
Current (0-30 Days Outstanding)	$751	$522 - 1,420
31-60 Days Outstanding	$876	$597 - 1,357
61-90 Days Outstanding	$648	$283 - 1,407
Over 90 Days Outstanding	$1,036	$618 - 1,791
Total	$733	$555 - 1,551
Aging of Receivable Accounts:		
Current (0-30 Days Outstanding)	73.0%	65.3 - 81.1%
31-60 Days Outstanding	14.8%	10.0 - 18.3%
61-90 Days Outstanding	6.3%	4.4 - 8.3%
Over 90 Days Outstanding	6.0%	3.0 - 7.9%
Total	100.0%	100.0 - 100.0%

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

PLUMBING SUPPLIES & EQUIPMENT FIRMS -- SALES UNDER $3,000,000

	TYPICAL	MIDDLE RANGE
INCOME STATEMENT		
Net Sales	100.0%	100.0 - 100.0%
Cost of Goods Sold	75.4%	71.3 - 78.0%
Gross Margin	25.5%	22.0 - 28.7%
Operating Expenses:		
Selling Expenses	5.2%	3.8 - 7.1%
Delivery Expenses	2.3%	1.5 - 3.1%
Warehouse Expenses	2.4%	1.9 - 3.8%
General & Administrative Expenses	9.7%	6.3 - 13.2%
Occupancy Expenses	1.8%	1.1 - 2.5%
Other Operating Expenses	0.0%	0.0 - 0.2%
Total Operating Expenses	22.1%	19.6 - 26.4%
Net Operating Profit	2.8%	-0.4 - 4.9%
Non-Operating Income	1.7%	1.1 - 2.6%
Non-Operating Expenses	1.4%	0.7 - 2.2%
Net Profit Before Tax	3.5%	0.3 - 5.7%
Net Profit After Tax	2.0%	1.0 - 3.4%
OPERATING EXPENSE CONTROL		
Total Operating Expense to Net Sales	22.1%	19.6 - 26.4%
Total Operating Expense to Gross Margin	89.8%	81.3 - 101.4%
Non-People Expense to Net Sales	7.2%	5.7 - 9.2%
Non-People Expense to Gross Margin	27.7%	23.1 - 37.5%
INTEREST EXPENSE		
Interest Expense to Net Sales	0.9%	0.2 - 1.9%
Times Interest Earned	3.4X	1.2 - 12.5X
BALANCE SHEET		
Cash	10.9%	2.2 - 17.7%
Accounts & Notes Receivable, Trade(Net)	27.2%	20.0 - 32.7%
Inventory	49.7%	42.7 - 58.0%
Other Current Assets	2.7%	0.1 - 3.3%
Total Current Assets	90.5%	85.9 - 96.7%
All Other Assets	9.5%	3.3 - 14.1%
Total Assets	100.0%	100.0 - 100.0%
Total Current Liabilities	34.1%	21.5 - 45.7%
Total Long-Term Liabilities	8.9%	0.0 - 18.9%
Total Liabilities	43.0%	27.5 - 62.6%
Total Net Worth	57.0%	37.4 - 72.5%
Total Liabilities & Net Worth	100.0%	100.0 - 100.0%

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

PLUMBING SUPPLIES & EQUIPMENT FIRMS -- SALES $3,000,000 TO $7,000,000

	TYPICAL	MIDDLE RANGE
OVERALL PERFORMANCE		
Net Profit After Tax to Net Worth	12.16%	6.34 - 17.24%
Total Assets to Net Worth	1.80X	1.44 - 2.75X
Net Profit After Tax to Total Assets	5.36%	3.08 - 8.06%
Net Sales to Total Assets	2.86X	2.27 - 3.36X
Net Profit After Tax to Net Sales	1.80%	1.30 - 2.70%
Net Profit Before Tax to Net Worth	18.58%	8.97 - 23.81%
Net Profit Before Tax to Total Assets	7.85%	3.68 - 12.46%
EBIT to Total Assets	10.36%	7.14 - 13.51%
SALES ANALYSIS		
Net Sales($000)	$4,552	$3,702 - 5,492
Percent Sales Change from Prior Year	11.10%	0.81 - 20.65%
Sales Mix:		
Direct Sales	10.2%	0.5 - 15.0%
Warehouse Sales - Counter and Delivery	89.8%	85.0 - 99.5%
TOTAL SALES	100.0%	100.0 - 100.0%
PRODUCT SALES MIX		
Plumbing Supplies & Equipment	76.4%	62.5 - 90.5%
Heating & Cooling Supplies & Equipment	13.1%	0.5 - 25.0%
Industrial P-V-F (Pipes-Valves-Fittings)	5.9%	0.0 - 9.0%
Other Industrial Supplies & Equipment	1.0%	0.0 - 1.0%
Other Products	3.7%	0.0 - 5.0%
TOTAL SALES	100.0%	100.0 - 100.0%
GROSS MARGIN		
Gross Margin on Net Sales	24.2%	20.9 - 26.4%
Gross Margin on Direct Shipments	10.2%	8.1 - 17.8%
Gross Margin on Warehouse Sales	25.0%	21.8 - 27.5%
ASSET AND FINANCIAL MANAGEMENT		
Current Asset Turn (Sales/Current Assets)	3.09X	2.60 - 3.66X
Total Debt to Net Worth	80.5%	44.4 - 175.3%
Current Debt to Net Worth	65.9%	40.2 - 125.5%
Current Assets to Current Debt	2.55X	1.84 - 3.46X
Current Assets Minus Inventory/Curr Debt	1.11X	0.85 - 1.99X
INVOICE/TRANSACTION DATA		
Billing Lines Per Invoice	6.0	5.0 - 8.8
Average Invoice Size	$158	$113 - 209
Average Billing Line	$28.10	$19.33 - 33.00

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

PLUMBING SUPPLIES & EQUIPMENT FIRMS -- SALES $3,000,000 TO $7,000,000

	TYPICAL	MIDDLE RANGE
PERSONNEL PRODUCTIVITY		
Sales Per Employee	$212,565	$164,503 - 272,656
Gross Margin Per Employee	$51,310	$42,429 - 61,956
Average Compensation Per Employee	$24,817	$22,195 - 28,215
Average Fringe Benefits Per Employee	$4,426	$3,613 - 6,246
Compensation & Fringes Per Employee	$29,279	$25,823 - 34,659
Payroll to Net Sales	12.1%	9.6 - 13.6%
Fringe Benefits to Net Sales	2.1%	1.5 - 2.8%
Payroll & Fringes to Net Sales	13.9%	11.4 - 16.0%
Payroll to Gross Margin	48.7%	43.8 - 53.3%
Fringe Benefits to Gross Margin	8.6%	7.1 - 11.7%
Payroll & Fringes to Gross Margin	57.8%	51.8 - 62.3%
INVENTORY MANAGEMENT		
Cost of Whse Goods Sold to Ave Inventory	4.15X	3.30 - 5.64X
No. of Days Average Inventory Carried	88 Days	65 - 110 Days
Total Cost of Goods Sold to Ave Inventory	4.68X	3.54 - 6.13X
Whse Gross Margin Return on Ave Inventory	136%	110 - 185%
Turn & Earn Profitability Index	95%	83 - 145%
Percent of Firms on LIFO	39.53%	
ACCOUNTS RECEIVABLE		
Average Collection Period	47 Days	42 - 57 Days
Gross Margin Return on Receivables	180%	145 - 218%
Aging of Receivable Dollars:		
Current (0-30 Days Outstanding)	64.4%	58.3 - 72.0%
31-60 Days Outstanding	16.9%	13.0 - 20.2%
61-90 Days Outstanding	7.9%	5.6 - 9.2%
Over 90 Days Outstanding	10.8%	3.7 - 14.9%
Total	100.0%	100.0 - 100.0%
Average Account Balance:		
Current (0-30 Days Outstanding)	$1,183	$859 - 2,132
31-60 Days Outstanding	$1,078	$850 - 2,924
61-90 Days Outstanding	$1,277	$918 - 2,427
Over 90 Days Outstanding	$1,716	$1,124 - 3,143
Total	$1,214	$865 - 1,937
Aging of Receivable Accounts:		
Current (0-30 Days Outstanding)	67.7%	64.1 - 74.2%
31-60 Days Outstanding	17.2%	11.8 - 22.0%
61-90 Days Outstanding	7.8%	5.2 - 8.5%
Over 90 Days Outstanding	7.3%	3.6 - 8.3%
Total	100.0%	100.0 - 100.0%

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

PLUMBING SUPPLIES & EQUIPMENT FIRMS -- SALES $3,000,000 TO $7,000,000

	TYPICAL	MIDDLE RANGE
INCOME STATEMENT		
Net Sales	100.0%	100.0 - 100.0%
Cost of Goods Sold	75.3%	73.6 - 79.1%
Gross Margin	24.2%	20.9 - 26.4%
Operating Expenses:		
Selling Expenses	5.4%	3.6 - 6.6%
Delivery Expenses	1.9%	1.4 - 2.3%
Warehouse Expenses	2.4%	1.5 - 3.1%
General & Administrative Expenses	8.6%	6.9 - 10.9%
Occupancy Expenses	1.6%	1.3 - 2.3%
Other Operating Expenses	0.0%	0.0 - 0.3%
Total Operating Expenses	21.1%	18.6 - 23.8%
Net Operating Profit	2.6%	1.4 - 4.6%
Non-Operating Income	1.7%	0.6 - 2.5%
Non-Operating Expenses	1.2%	1.0 - 2.1%
Net Profit Before Tax	2.3%	1.6 - 4.2%
Net Profit After Tax	1.8%	1.3 - 2.7%
OPERATING EXPENSE CONTROL		
Total Operating Expense to Net Sales	21.1%	18.6 - 23.8%
Total Operating Expense to Gross Margin	89.3%	82.4 - 94.4%
Non-People Expense to Net Sales	6.8%	5.9 - 9.0%
Non-People Expense to Gross Margin	29.3%	26.6 - 35.1%
INTEREST EXPENSE		
Interest Expense to Net Sales	0.7%	0.4 - 1.3%
Times Interest Earned	4.8X	2.0 - 8.2X
BALANCE SHEET		
Cash	6.7%	0.8 - 11.8%
Accounts & Notes Receivable, Trade(Net)	35.2%	27.6 - 40.0%
Inventory	45.1%	32.0 - 56.6%
Other Current Assets	2.1%	0.3 - 2.1%
Total Current Assets	89.1%	85.6 - 94.5%
All Other Assets	10.9%	5.5 - 14.4%
Total Assets	100.0%	100.0 - 100.0%
Total Current Liabilities	35.4%	26.3 - 46.4%
Total Long-Term Liabilities	10.7%	2.5 - 11.6%
Total Liabilities	46.1%	28.7 - 57.8%
Total Net Worth	53.9%	42.2 - 71.3%
Total Liabilities & Net Worth	100.0%	100.0 - 100.0%

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

PLUMBING SUPPLIES & EQUIPMENT FIRMS -- SALES $7,000,000 TO $12,000,000

	TYPICAL	MIDDLE RANGE
OVERALL PERFORMANCE		
Net Profit After Tax to Net Worth	6.35%	2.63 - 13.75%
Total Assets to Net Worth	2.37X	1.60 - 3.19X
Net Profit After Tax to Total Assets	3.54%	1.08 - 4.73%
Net Sales to Total Assets	2.23X	1.83 - 3.12X
Net Profit After Tax to Net Sales	1.20%	0.40 - 2.50%
Net Profit Before Tax to Net Worth	10.02%	3.78 - 18.18%
Net Profit Before Tax to Total Assets	4.91%	1.48 - 7.59%
EBIT to Total Assets	6.77%	4.23 - 10.38%
SALES ANALYSIS		
Net Sales($000)	$9,628	$7,849 - 10,598
Percent Sales Change from Prior Year	8.18%	0.07 - 18.53%
Sales Mix:		
Direct Sales	9.6%	3.5 - 14.3%
Warehouse Sales - Counter and Delivery	90.4%	85.7 - 96.5%
TOTAL SALES	100.0%	100.0 - 100.0%
PRODUCT SALES MIX		
Plumbing Supplies & Equipment	74.9%	60.0 - 91.8%
Heating & Cooling Supplies & Equipment	15.4%	2.8 - 28.3%
Industrial P-V-F (Pipes-Valves-Fittings)	6.1%	0.0 - 6.3%
Other Industrial Supplies & Equipment	0.4%	0.0 - 0.4%
Other Products	3.3%	0.0 - 5.3%
TOTAL SALES	100.0%	100.0 - 100.0%
GROSS MARGIN		
Gross Margin on Net Sales	25.2%	21.7 - 27.2%
Gross Margin on Direct Shipments	12.0%	9.8 - 16.3%
Gross Margin on Warehouse Sales	26.5%	23.2 - 29.5%
ASSET AND FINANCIAL MANAGEMENT		
Current Asset Turn (Sales/Current Assets)	2.78X	2.44 - 3.42X
Total Debt to Net Worth	137.0%	59.9 - 218.6%
Current Debt to Net Worth	86.7%	42.0 - 180.0%
Current Assets to Current Debt	2.51X	1.56 - 3.27X
Current Assets Minus Inventory/Curr Debt	0.95X	0.62 - 1.32X
INVOICE/TRANSACTION DATA		
Billing Lines Per Invoice	5.0	4.0 - 7.0
Average Invoice Size	$150	$108 - 166
Average Billing Line	$25.07	$17.29 - 41.49

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

PLUMBING SUPPLIES & EQUIPMENT FIRMS -- SALES $7,000,000 TO $12,000,000

	TYPICAL	MIDDLE RANGE
PERSONNEL PRODUCTIVITY		
Sales Per Employee	$187,966	$155,968 - 225,582
Gross Margin Per Employee	$45,916	$35,691 - 58,450
Average Compensation Per Employee	$22,223	$19,522 - 25,696
Average Fringe Benefits Per Employee	$3,973	$2,717 - 5,803
Compensation & Fringes Per Employee	$24,962	$22,561 - 31,072
Payroll to Net Sales	11.9%	10.4 - 13.1%
Fringe Benefits to Net Sales	2.0%	1.5 - 3.3%
Payroll & Fringes to Net Sales	14.4%	12.4 - 16.3%
Payroll to Gross Margin	50.2%	43.7 - 54.0%
Fringe Benefits to Gross Margin	8.9%	7.3 - 11.4%
Payroll & Fringes to Gross Margin	59.5%	52.9 - 64.2%
INVENTORY MANAGEMENT		
Cost of Whse Goods Sold to Ave Inventory	3.37X	2.41 - 4.63X
No. of Days Average Inventory Carried	108 Days	79 - 152 Days
Total Cost of Goods Sold to Ave Inventory	3.69X	2.99 - 4.73X
Whse Gross Margin Return on Ave Inventory	110%	93 - 132%
Turn & Earn Profitability Index	75%	68 - 92%
Percent of Firms on LIFO	59.09%	
ACCOUNTS RECEIVABLE		
Average Collection Period	45 Days	42 - 52 Days
Gross Margin Return on Receivables	184%	166 - 255%
Aging of Receivable Dollars:		
Current (0-30 Days Outstanding)	65.8%	60.4 - 70.9%
31-60 Days Outstanding	16.2%	11.3 - 21.6%
61-90 Days Outstanding	8.3%	5.3 - 10.3%
Over 90 Days Outstanding	9.7%	3.5 - 14.5%
Total	100.0%	100.0 - 100.0%
Average Account Balance:		
Current (0-30 Days Outstanding)	$1,363	$671 - 1,806
31-60 Days Outstanding	$1,388	$907 - 2,254
61-90 Days Outstanding	$1,470	$939 - 2,185
Over 90 Days Outstanding	$1,725	$998 - 2,392
Total	$1,482	$920 - 1,859
Aging of Receivable Accounts:		
Current (0-30 Days Outstanding)	72.5%	65.3 - 79.7%
31-60 Days Outstanding	14.1%	7.5 - 19.1%
61-90 Days Outstanding	7.2%	3.6 - 9.5%
Over 90 Days Outstanding	6.2%	3.7 - 7.5%
Total	100.0%	100.0 - 100.0%

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

PLUMBING SUPPLIES & EQUIPMENT FIRMS -- SALES $7,000,000 TO $12,000,000

	TYPICAL	MIDDLE RANGE
INCOME STATEMENT		
Net Sales	100.0%	100.0 - 100.0%
Cost of Goods Sold	75.8%	72.8 - 78.3%
Gross Margin	25.2%	21.7 - 27.2%
Operating Expenses:		
Selling Expenses	6.5%	4.6 - 7.7%
Delivery Expenses	2.0%	1.2 - 2.5%
Warehouse Expenses	2.8%	1.4 - 3.9%
General & Administrative Expenses	7.9%	6.6 - 9.9%
Occupancy Expenses	1.7%	1.3 - 3.1%
Other Operating Expenses	0.0%	0.0 - 1.6%
Total Operating Expenses	21.9%	19.8 - 24.4%
Net Operating Profit	1.7%	0.4 - 4.0%
Non-Operating Income	1.9%	0.5 - 3.0%
Non-Operating Expenses	1.7%	0.5 - 2.7%
Net Profit Before Tax	1.4%	0.5 - 4.2%
Net Profit After Tax	1.2%	0.4 - 2.5%
OPERATING EXPENSE CONTROL		
Total Operating Expense to Net Sales	21.9%	19.8 - 24.4%
Total Operating Expense to Gross Margin	93.4%	85.2 - 98.3%
Non-People Expense to Net Sales	7.7%	6.8 - 8.7%
Non-People Expense to Gross Margin	32.7%	28.6 - 37.3%
INTEREST EXPENSE		
Interest Expense to Net Sales	1.0%	0.6 - 1.7%
Times Interest Earned	2.6X	1.4 - 5.2X
BALANCE SHEET		
Cash	6.2%	1.3 - 8.5%
Accounts & Notes Receivable, Trade(Net)	24.1%	17.6 - 27.6%
Inventory	48.4%	44.6 - 55.8%
Other Current Assets	6.2%	0.9 - 6.2%
Total Current Assets	84.9%	78.9 - 92.5%
All Other Assets	15.1%	7.5 - 21.1%
Total Assets	100.0%	100.0 - 100.0%
Total Current Liabilities	33.8%	22.6 - 47.2%
Total Long-Term Liabilities	12.4%	1.6 - 18.1%
Total Liabilities	46.2%	30.0 - 67.4%
Total Net Worth	53.8%	32.6 - 70.0%
Total Liabilities & Net Worth	100.0%	100.0 - 100.0%

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

PLUMBING SUPPLIES & EQUIPMENT FIRMS -- SALES OVER $12,000,000

	TYPICAL	MIDDLE RANGE
OVERALL PERFORMANCE		
Net Profit After Tax to Net Worth	9.40%	4.26 - 16.15%
Total Assets to Net Worth	2.53X	1.81 - 4.09X
Net Profit After Tax to Total Assets	3.10%	2.05 - 6.64%
Net Sales to Total Assets	2.65X	2.21 - 3.13X
Net Profit After Tax to Net Sales	1.10%	0.80 - 2.00%
Net Profit Before Tax to Net Worth	15.85%	5.84 - 26.01%
Net Profit Before Tax to Total Assets	5.18%	2.90 - 8.79%
EBIT to Total Assets	9.39%	4.91 - 12.25%
SALES ANALYSIS		
Net Sales($000)	$22,797	$15,902 - 32,465
Percent Sales Change from Prior Year	11.12%	-4.46 - 18.32%
Sales Mix:		
Direct Sales	13.4%	8.8 - 17.8%
Warehouse Sales - Counter and Delivery	86.6%	82.2 - 91.2%
TOTAL SALES	100.0%	100.0 - 100.0%
PRODUCT SALES MIX		
Plumbing Supplies & Equipment	75.4%	60.0 - 95.0%
Heating & Cooling Supplies & Equipment	14.1%	0.0 - 27.9%
Industrial P-V-F (Pipes-Valves-Fittings)	4.1%	0.0 - 5.0%
Other Industrial Supplies & Equipment	2.5%	0.0 - 2.9%
Other Products	3.9%	0.0 - 5.6%
TOTAL SALES	100.0%	100.0 - 100.0%
GROSS MARGIN		
Gross Margin on Net Sales	22.5%	20.6 - 24.5%
Gross Margin on Direct Shipments	10.6%	9.0 - 14.3%
Gross Margin on Warehouse Sales	23.6%	22.7 - 26.0%
ASSET AND FINANCIAL MANAGEMENT		
Current Asset Turn (Sales/Current Assets)	3.02X	2.75 - 3.49X
Total Debt to Net Worth	152.9%	81.3 - 308.3%
Current Debt to Net Worth	122.2%	48.2 - 266.6%
Current Assets to Current Debt	1.99X	1.34 - 2.95X
Current Assets Minus Inventory/Curr Debt	0.93X	0.64 - 1.51X
INVOICE/TRANSACTION DATA		
Billing Lines Per Invoice	4.9	4.0 - 6.0
Average Invoice Size	$181	$128 - 258
Average Billing Line	$39.17	$26.62 - 54.57

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

PLUMBING SUPPLIES & EQUIPMENT FIRMS -- SALES OVER $12,000,000

	TYPICAL	MIDDLE RANGE
PERSONNEL PRODUCTIVITY		
Sales Per Employee	$213,907	$192,632 - 275,924
Gross Margin Per Employee	$48,939	$43,026 - 60,636
Average Compensation Per Employee	$24,035	$20,694 - 26,501
Average Fringe Benefits Per Employee	$4,285	$3,565 - 5,172
Compensation & Fringes Per Employee	$27,806	$24,417 - 31,745
Payroll to Net Sales	10.6%	9.1 - 11.4%
Fringe Benefits to Net Sales	1.7%	1.5 - 2.4%
Payroll & Fringes to Net Sales	11.8%	10.5 - 13.1%
Payroll to Gross Margin	47.6%	44.1 - 51.1%
Fringe Benefits to Gross Margin	7.5%	7.0 - 10.2%
Payroll & Fringes to Gross Margin	54.5%	49.8 - 59.6%
INVENTORY MANAGEMENT		
Cost of Whse Goods Sold to Ave Inventory	3.77X	3.02 - 4.72X
No. of Days Average Inventory Carried	97 Days	77 - 121 Days
Total Cost of Goods Sold to Ave Inventory	4.42X	3.65 - 5.60X
Whse Gross Margin Return on Ave Inventory	118%	94 - 146%
Turn & Earn Profitability Index	89%	70 - 113%
Percent of Firms on LIFO	80.00%	
ACCOUNTS RECEIVABLE		
Average Collection Period	53 Days	47 - 60 Days
Gross Margin Return on Receivables	154%	122 - 179%
Aging of Receivable Dollars:		
Current (0-30 Days Outstanding)	65.2%	56.8 - 73.3%
31-60 Days Outstanding	18.0%	14.6 - 21.2%
61-90 Days Outstanding	7.0%	4.5 - 9.4%
Over 90 Days Outstanding	9.8%	4.8 - 14.4%
Total	100.0%	100.0 - 100.0%
Average Account Balance:		
Current (0-30 Days Outstanding)	$1,886	$1,207 - 3,659
31-60 Days Outstanding	$2,502	$2,005 - 3,746
61-90 Days Outstanding	$2,107	$1,313 - 4,168
Over 90 Days Outstanding	$3,118	$1,427 - 4,187
Total	$1,762	$1,193 - 3,333
Aging of Receivable Accounts:		
Current (0-30 Days Outstanding)	68.4%	51.2 - 81.9%
31-60 Days Outstanding	16.3%	10.0 - 22.7%
61-90 Days Outstanding	7.0%	3.3 - 9.9%
Over 90 Days Outstanding	8.3%	4.6 - 13.3%
Total	100.0%	100.0 - 100.0%

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

PLUMBING SUPPLIES & EQUIPMENT FIRMS -- SALES OVER $12,000,000

	TYPICAL	MIDDLE RANGE
INCOME STATEMENT		
Net Sales	100.0%	100.0 - 100.0%
Cost of Goods Sold	77.9%	75.5 - 79.4%
Gross Margin	22.5%	20.6 - 24.5%
Operating Expenses:		
Selling Expenses	6.4%	4.9 - 7.5%
Delivery Expenses	1.7%	1.4 - 2.2%
Warehouse Expenses	2.6%	2.1 - 3.5%
General & Administrative Expenses	6.7%	5.4 - 8.2%
Occupancy Expenses	1.6%	1.1 - 2.5%
Other Operating Expenses	0.0%	0.0 - 0.8%
Total Operating Expenses	20.2%	17.8 - 22.1%
Net Operating Profit	2.8%	1.3 - 3.6%
Non-Operating Income	1.9%	1.3 - 2.4%
Non-Operating Expenses	2.3%	1.5 - 3.3%
Net Profit Before Tax	2.1%	1.1 - 2.7%
Net Profit After Tax	1.1%	0.8 - 2.0%
OPERATING EXPENSE CONTROL		
Total Operating Expense to Net Sales	20.2%	17.8 - 22.1%
Total Operating Expense to Gross Margin	86.6%	82.2 - 94.9%
Non-People Expense to Net Sales	7.8%	6.2 - 8.5%
Non-People Expense to Gross Margin	32.0%	26.8 - 35.5%
INTEREST EXPENSE		
Interest Expense to Net Sales	1.2%	0.6 - 1.9%
Times Interest Earned	2.5X	1.8 - 4.0X
BALANCE SHEET		
Cash	2.9%	0.1 - 2.9%
Accounts & Notes Receivable, Trade(Net)	34.7%	28.9 - 42.2%
Inventory	45.5%	41.8 - 52.9%
Other Current Assets	2.3%	0.4 - 2.3%
Total Current Assets	85.4%	80.3 - 93.5%
All Other Assets	14.6%	6.5 - 19.7%
Total Assets	100.0%	100.0 - 100.0%
Total Current Liabilities	44.4%	25.6 - 66.0%
Total Long-Term Liabilities	11.5%	3.2 - 15.2%
Total Liabilities	55.8%	39.2 - 75.5%
Total Net Worth	44.2%	24.5 - 60.8%
Total Liabilities & Net Worth	100.0%	100.0 - 100.0%

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

HIGH PROFIT PLUMBING SUPPLIES & EQUIPMENT FIRMS

	TYPICAL	MIDDLE RANGE
OVERALL PERFORMANCE		
Net Profit After Tax to Net Worth	14.39%	10.87 - 19.63%
Total Assets to Net Worth	1.80X	1.38 - 2.36X
Net Profit After Tax to Total Assets	7.34%	5.82 - 9.16%
Net Sales to Total Assets	2.70X	2.18 - 3.20X
Net Profit After Tax to Net Sales	2.70%	2.20 - 3.80%
Net Profit Before Tax to Net Worth	23.91%	15.32 - 32.01%
Net Profit Before Tax to Total Assets	11.30%	8.86 - 15.19%
EBIT to Total Assets	13.42%	11.60 - 15.88%
SALES ANALYSIS		
Net Sales($000)	$4,940	$2,547 - 10,325
Percent Sales Change from Prior Year	16.59%	3.95 - 22.21%
Sales Mix:		
Direct Sales	10.1%	1.5 - 14.6%
Warehouse Sales - Counter and Delivery	89.9%	85.4 - 98.5%
TOTAL SALES	100.0%	100.0 - 100.0%
PRODUCT SALES MIX		
Plumbing Supplies & Equipment	76.2%	61.0 - 94.0%
Heating & Cooling Supplies & Equipment	13.9%	1.0 - 25.0%
Industrial P-V-F (Pipes-Valves-Fittings)	4.8%	0.0 - 5.0%
Other Industrial Supplies & Equipment	0.8%	0.0 - 0.8%
Other Products	4.3%	0.0 - 5.6%
TOTAL SALES	100.0%	100.0 - 100.0%
GROSS MARGIN		
Gross Margin on Net Sales	24.3%	21.2 - 26.4%
Gross Margin on Direct Shipments	9.6%	7.5 - 14.8%
Gross Margin on Warehouse Sales	25.2%	22.8 - 27.7%
ASSET AND FINANCIAL MANAGEMENT		
Current Asset Turn (Sales/Current Assets)	3.10X	2.46 - 3.64X
Total Debt to Net Worth	80.5%	37.8 - 136.1%
Current Debt to Net Worth	59.9%	36.1 - 114.9%
Current Assets to Current Debt	2.62X	1.80 - 4.05X
Current Assets Minus Inventory/Curr Debt	1.27X	0.80 - 1.99X
INVOICE/TRANSACTION DATA		
Billing Lines Per Invoice	6.0	4.5 - 8.0
Average Invoice Size	$152	$123 - 236
Average Billing Line	$28.06	$20.32 - 39.72

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

HIGH PROFIT PLUMBING SUPPLIES & EQUIPMENT FIRMS

	TYPICAL	MIDDLE RANGE
PERSONNEL PRODUCTIVITY		
Sales Per Employee	$230,899	$165,691 - 280,674
Gross Margin Per Employee	$53,785	$42,919 - 65,558
Average Compensation Per Employee	$24,791	$19,507 - 28,802
Average Fringe Benefits Per Employee	$4,277	$3,114 - 5,636
Compensation & Fringes Per Employee	$29,115	$22,407 - 35,069
Payroll to Net Sales	11.1%	9.3 - 12.5%
Fringe Benefits to Net Sales	1.8%	1.5 - 2.5%
Payroll & Fringes to Net Sales	12.6%	10.8 - 14.8%
Payroll to Gross Margin	45.5%	40.5 - 49.0%
Fringe Benefits to Gross Margin	7.5%	6.7 - 9.9%
Payroll & Fringes to Gross Margin	53.0%	47.5 - 57.6%
INVENTORY MANAGEMENT		
Cost of Whse Goods Sold to Ave Inventory	3.88X	2.76 - 5.52X
No. of Days Average Inventory Carried	94 Days	66 - 132 Days
Total Cost of Goods Sold to Ave Inventory	4.53X	3.36 - 5.90X
Whse Gross Margin Return on Ave Inventory	136%	104 - 169%
Turn & Earn Profitability Index	103%	76 - 126%
Percent of Firms on LIFO	44.44%	
ACCOUNTS RECEIVABLE		
Average Collection Period	47 Days	42 - 57 Days
Gross Margin Return on Receivables	183%	156 - 226%
Aging of Receivable Dollars:		
Current (0-30 Days Outstanding)	66.4%	59.2 - 73.8%
31-60 Days Outstanding	17.0%	12.7 - 21.4%
61-90 Days Outstanding	7.4%	4.9 - 9.7%
Over 90 Days Outstanding	9.3%	3.4 - 11.8%
Total	100.0%	100.0 - 100.0%
Average Account Balance:		
Current (0-30 Days Outstanding)	$1,525	$858 - 2,146
31-60 Days Outstanding	$1,453	$912 - 2,715
61-90 Days Outstanding	$1,272	$941 - 2,538
Over 90 Days Outstanding	$1,725	$928 - 2,848
Total	$1,431	$928 - 2,065
Aging of Receivable Accounts:		
Current (0-30 Days Outstanding)	69.9%	64.7 - 79.3%
31-60 Days Outstanding	16.6%	9.7 - 20.8%
61-90 Days Outstanding	7.2%	4.5 - 9.3%
Over 90 Days Outstanding	6.2%	3.7 - 7.4%
Total	100.0%	100.0 - 100.0%

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

HIGH PROFIT PLUMBING SUPPLIES & EQUIPMENT FIRMS

	TYPICAL	MIDDLE RANGE
INCOME STATEMENT		
Net Sales	100.0%	100.0 - 100.0%
Cost of Goods Sold	76.0%	73.6 - 78.8%
Gross Margin	24.3%	21.2 - 26.4%
Operating Expenses:		
Selling Expenses	4.9%	3.8 - 6.5%
Delivery Expenses	2.0%	1.4 - 2.3%
Warehouse Expenses	2.6%	1.6 - 3.5%
General & Administrative Expenses	7.9%	6.2 - 10.5%
Occupancy Expenses	1.5%	0.9 - 2.3%
Other Operating Expenses	0.0%	0.0 - 0.3%
Total Operating Expenses	19.5%	17.9 - 22.3%
Net Operating Profit	4.4%	2.9 - 5.2%
Non-Operating Income	1.6%	0.5 - 2.8%
Non-Operating Expenses	1.2%	0.7 - 2.0%
Net Profit Before Tax	4.4%	3.5 - 6.1%
Net Profit After Tax	2.7%	2.2 - 3.8%
OPERATING EXPENSE CONTROL		
Total Operating Expense to Net Sales	19.5%	17.9 - 22.3%
Total Operating Expense to Gross Margin	82.8%	78.7 - 86.0%
Non-People Expense to Net Sales	6.5%	5.6 - 7.7%
Non-People Expense to Gross Margin	27.8%	23.5 - 30.9%
INTEREST EXPENSE		
Interest Expense to Net Sales	0.6%	0.2 - 1.3%
Times Interest Earned	6.9X	4.6 - 22.4X
BALANCE SHEET		
Cash	9.5%	1.1 - 16.3%
Accounts & Notes Receivable, Trade(Net)	31.9%	24.1 - 38.0%
Inventory	43.9%	36.2 - 50.1%
Other Current Assets	2.3%	0.4 - 2.3%
Total Current Assets	87.5%	83.7 - 93.6%
All Other Assets	12.5%	6.4 - 16.3%
Total Assets	100.0%	100.0 - 100.0%
Total Current Liabilities	34.5%	21.0 - 42.5%
Total Long-Term Liabilities	9.4%	1.5 - 12.7%
Total Liabilities	43.9%	27.3 - 57.8%
Total Net Worth	56.1%	42.2 - 72.7%
Total Liabilities & Net Worth	100.0%	100.0 - 100.0%

Industrial P-V-F Firms

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

INDUSTRIAL P-V-F FIRMS

	TYPICAL	MIDDLE RANGE
OVERALL PERFORMANCE		
Net Profit After Tax to Net Worth	8.33%	3.81 - 14.64%
Total Assets to Net Worth	1.85X	1.45 - 3.33X
Net Profit After Tax to Total Assets	3.80%	1.43 - 7.02%
Net Sales to Total Assets	2.58X	2.20 - 2.92X
Net Profit After Tax to Net Sales	1.50%	0.60 - 2.90%
Net Profit Before Tax to Net Worth	12.61%	4.45 - 21.03%
Net Profit Before Tax to Total Assets	5.39%	1.60 - 8.55%
EBIT to Total Assets	8.57%	4.76 - 13.38%
SALES ANALYSIS		
Net Sales ($000)	$7,386	$4,462 - 19,423
Percent Sales Change from Prior Year	9.48%	-0.75 - 20.02%
Sales Mix:		
Direct Sales	12.7%	5.0 - 19.9%
Warehouse Sales - Counter and Delivery	87.3%	80.1 - 95.0%
TOTAL SALES	100.0%	100.0 - 100.0%
PRODUCT SALES MIX		
Plumbing Supplies & Equipment	5.4%	0.0 - 5.4%
Heating & Cooling Supplies & Equipment	1.8%	0.0 - 1.8%
Industrial P-V-F (Pipes-Valves-Fittings)	85.9%	76.5 - 100.0%
Other Industrial Supplies & Equipment	3.1%	0.0 - 6.0%
Other Products	3.8%	0.0 - 3.8%
TOTAL SALES	100.0%	100.0 - 100.0%
GROSS MARGIN		
Gross Margin on Net Sales	27.1%	21.2 - 31.4%
Gross Margin on Direct Shipments	12.2%	11.0 - 17.7%
Gross Margin on Warehouse Sales	27.6%	23.3 - 31.6%
ASSET AND FINANCIAL MANAGEMENT		
Current Asset Turn (Sales/Current Assets)	2.97X	2.52 - 3.81X
Total Debt to Net Worth	84.1%	41.0 - 167.6%
Current Debt to Net Worth	74.1%	33.6 - 153.2%
Current Assets to Current Debt	2.27X	1.59 - 3.59X
Current Assets Minus Inventory/Curr Debt	1.00X	0.78 - 1.50X
INVOICE/TRANSACTION DATA		
Billing Lines Per Invoice	5.0	4.0 - 7.0
Average Invoice Size	$296	$219 - 405
Average Billing Line	$58.09	$38.87 - 83.13

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

INDUSTRIAL P-V-F FIRMS

	TYPICAL	MIDDLE RANGE
PERSONNEL PRODUCTIVITY		
Sales Per Employee	$218,040	$176,378 - 260,716
Gross Margin Per Employee	$54,123	$47,518 - 62,064
Average Compensation Per Employee	$24,878	$23,447 - 27,822
Average Fringe Benefits Per Employee	$4,471	$3,960 - 6,771
Compensation & Fringes Per Employee	$29,671	$27,506 - 33,202
Payroll to Net Sales	12.8%	10.3 - 15.4%
Fringe Benefits to Net Sales	2.5%	1.8 - 3.2%
Payroll & Fringes to Net Sales	15.9%	12.5 - 18.4%
Payroll to Gross Margin	48.5%	43.9 - 53.3%
Fringe Benefits to Gross Margin	8.7%	6.9 - 10.8%
Payroll & Fringes to Gross Margin	57.6%	50.0 - 62.2%
INVENTORY MANAGEMENT		
Cost of Whse Goods Sold to Ave Inventory	3.32X	2.67 - 4.09X
No. of Days Average Inventory Carried	110 Days	89 - 137 Days
Total Cost of Goods Sold to Ave Inventory	4.09X	3.24 - 4.85X
Whse Gross Margin Return on Ave Inventory	127%	105 - 149%
Turn & Earn Profitability Index	90%	75 - 110%
Percent of Firms on LIFO	60.61%	
ACCOUNTS RECEIVABLE		
Average Collection Period	43 Days	36 - 52 Days
Gross Margin Return on Receivables	214%	170 - 248%
Aging of Receivable Dollars:		
Current (0-30 Days Outstanding)	59.9%	49.2 - 71.3%
31-60 Days Outstanding	23.6%	17.1 - 27.8%
61-90 Days Outstanding	9.2%	5.8 - 11.9%
Over 90 Days Outstanding	7.3%	1.9 - 9.9%
Total	100.0%	100.0 - 100.0%
Average Account Balance:		
Current (0-30 Days Outstanding)	$2,142	$911 - 3,663
31-60 Days Outstanding	$1,898	$1,134 - 3,867
61-90 Days Outstanding	$1,933	$915 - 3,294
Over 90 Days Outstanding	$1,516	$459 - 3,434
Total	$1,797	$918 - 3,314
Aging of Receivable Accounts:		
Current (0-30 Days Outstanding)	60.2%	45.5 - 76.7%
31-60 Days Outstanding	20.8%	14.4 - 25.3%
61-90 Days Outstanding	9.5%	5.4 - 12.4%
Over 90 Days Outstanding	9.5%	3.7 - 13.8%
Total	100.0%	100.0 - 100.0%

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

INDUSTRIAL P-V-F FIRMS

	TYPICAL	MIDDLE RANGE
INCOME STATEMENT		
Net Sales	100.0%	100.0 - 100.0%
Cost of Goods Sold	72.3%	68.6 - 78.8%
Gross Margin	27.1%	21.2 - 31.4%
Operating Expenses:		
Selling Expenses	7.3%	5.5 - 9.0%
Delivery Expenses	2.3%	1.6 - 3.1%
Warehouse Expenses	2.9%	1.9 - 5.0%
General & Administrative Expenses	8.4%	5.6 - 10.3%
Occupancy Expenses	1.3%	0.9 - 1.9%
Other Operating Expenses	0.0%	0.0 - 0.4%
Total Operating Expenses	23.1%	19.5 - 27.0%
Net Operating Profit	3.1%	1.2 - 4.4%
Non-Operating Income	1.3%	0.4 - 2.0%
Non-Operating Expenses	1.9%	1.2 - 2.4%
Net Profit Before Tax	2.0%	0.6 - 3.2%
Net Profit After Tax	1.5%	0.6 - 2.9%
OPERATING EXPENSE CONTROL		
Total Operating Expense to Net Sales	23.1%	19.5 - 27.0%
Total Operating Expense to Gross Margin	89.3%	84.7 - 96.1%
Non-People Expense to Net Sales	7.3%	6.3 - 8.8%
Non-People Expense to Gross Margin	30.1%	26.0 - 34.2%
INTEREST EXPENSE		
Interest Expense to Net Sales	0.8%	0.4 - 1.8%
Times Interest Earned	3.0X	1.8 - 5.8X
BALANCE SHEET		
Cash	4.8%	1.0 - 6.8%
Accounts & Notes Receivable, Trade(Net)	31.6%	25.2 - 37.6%
Inventory	48.0%	38.4 - 58.6%
Other Current Assets	2.0%	0.5 - 2.7%
Total Current Assets	86.3%	79.6 - 93.6%
All Other Assets	13.7%	6.4 - 20.4%
Total Assets	100.0%	100.0 - 100.0%
Total Current Liabilities	39.2%	22.1 - 50.8%
Total Long-Term Liabilities	10.8%	0.0 - 20.2%
Total Liabilities	50.0%	26.7 - 65.8%
Total Net Worth	50.0%	34.2 - 73.2%
Total Liabilities & Net Worth	100.0%	100.0 - 100.0%

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

INDUSTRIAL P-V-F FIRMS -- SALES UNDER $4,000,000

	TYPICAL	MIDDLE RANGE
OVERALL PERFORMANCE		
Net Profit After Tax to Net Worth	0.00%	Insufficient Data
Total Assets to Net Worth	3.55X	Insufficient Data
Net Profit After Tax to Total Assets	0.91%	Insufficient Data
Net Sales to Total Assets	2.69X	Insufficient Data
Net Profit After Tax to Net Sales	0.30%	Insufficient Data
Net Profit Before Tax to Net Worth	12.77%	Insufficient Data
Net Profit Before Tax to Total Assets	3.15%	Insufficient Data
EBIT to Total Assets	9.35%	Insufficient Data
SALES ANALYSIS		
Net Sales($000)	$3,413	Insufficient Data
Percent Sales Change from Prior Year	8.49%	Insufficient Data
Sales Mix:		
Direct Sales	13.9%	Insufficient Data
Warehouse Sales - Counter and Delivery	86.1%	Insufficient Data
TOTAL SALES	100.0%	Insufficient Data
PRODUCT SALES MIX		
Plumbing Supplies & Equipment	0.8%	Insufficient Data
Heating & Cooling Supplies & Equipment	0.0%	Insufficient Data
Industrial P-V-F (Pipes-Valves-Fittings)	91.7%	Insufficient Data
Other Industrial Supplies & Equipment	5.8%	Insufficient Data
Other Products	1.7%	Insufficient Data
TOTAL SALES	100.0%	Insufficient Data
GROSS MARGIN		
Gross Margin on Net Sales	31.8%	Insufficient Data
Gross Margin on Direct Shipments	23.5%	Insufficient Data
Gross Margin on Warehouse Sales	29.5%	Insufficient Data
ASSET AND FINANCIAL MANAGEMENT		
Current Asset Turn (Sales/Current Assets)	2.88X	Insufficient Data
Total Debt to Net Worth	156.7%	Insufficient Data
Current Debt to Net Worth	131.2%	Insufficient Data
Current Assets to Current Debt	1.75X	Insufficient Data
Current Assets Minus Inventory/Curr Debt	0.88X	Insufficient Data
INVOICE/TRANSACTION DATA		
Billing Lines Per Invoice	4.5	Insufficient Data
Average Invoice Size	$270	Insufficient Data
Average Billing Line	$50.46	Insufficient Data

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

INDUSTRIAL P-V-F FIRMS -- SALES UNDER $4,000,000

	TYPICAL	MIDDLE RANGE
PERSONNEL PRODUCTIVITY		
Sales Per Employee	$167,807	Insufficient Data
Gross Margin Per Employee	$52,041	Insufficient Data
Average Compensation Per Employee	$24,878	Insufficient Data
Average Fringe Benefits Per Employee	$4,014	Insufficient Data
Compensation & Fringes Per Employee	$29,241	Insufficient Data
Payroll to Net Sales	15.9%	Insufficient Data
Fringe Benefits to Net Sales	2.6%	Insufficient Data
Payroll & Fringes to Net Sales	17.4%	Insufficient Data
Payroll to Gross Margin	52.7%	Insufficient Data
Fringe Benefits to Gross Margin	7.9%	Insufficient Data
Payroll & Fringes to Gross Margin	59.2%	Insufficient Data
INVENTORY MANAGEMENT		
Cost of Whse Goods Sold to Ave Inventory	3.21X	Insufficient Data
No. of Days Average Inventory Carried	115 Days	Insufficient Data
Total Cost of Goods Sold to Ave Inventory	3.99X	Insufficient Data
Whse Gross Margin Return on Ave Inventory	128%	Insufficient Data
Turn & Earn Profitability Index	78%	Insufficient Data
Percent of Firms on LIFO	50.00%	
ACCOUNTS RECEIVABLE		
Average Collection Period	44 Days	Insufficient Data
Gross Margin Return on Receivables	241%	Insufficient Data
Aging of Receivable Dollars:		
Current (0-30 Days Outstanding)	64.4%	Insufficient Data
31-60 Days Outstanding	25.5%	Insufficient Data
61-90 Days Outstanding	6.9%	Insufficient Data
Over 90 Days Outstanding	3.2%	Insufficient Data
Total	100.0%	Insufficient Data
Average Account Balance:		
Current (0-30 Days Outstanding)		Insufficient Data
31-60 Days Outstanding		Insufficient Data
61-90 Days Outstanding		Insufficient Data
Over 90 Days Outstanding		Insufficient Data
Total	$986	Insufficient Data
Aging of Receivable Accounts:		
Current (0-30 Days Outstanding)		Insufficient Data
31-60 Days Outstanding		Insufficient Data
61-90 Days Outstanding		Insufficient Data
Over 90 Days Outstanding		Insufficient Data
Total		Insufficient Data

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

INDUSTRIAL P-V-F FIRMS -- SALES UNDER $4,000,000

	TYPICAL	MIDDLE RANGE
INCOME STATEMENT		
Net Sales	100.0%	Insufficient Data
Cost of Goods Sold	69.8%	Insufficient Data
Gross Margin	31.8%	Insufficient Data
Operating Expenses:		
Selling Expenses	7.3%	Insufficient Data
Delivery Expenses	1.7%	Insufficient Data
Warehouse Expenses	5.0%	Insufficient Data
General & Administrative Expenses	10.4%	Insufficient Data
Occupancy Expenses	2.4%	Insufficient Data
Other Operating Expenses	0.0%	Insufficient Data
Total Operating Expenses	27.3%	Insufficient Data
Net Operating Profit	2.9%	Insufficient Data
Non-Operating Income	1.0%	Insufficient Data
Non-Operating Expenses	2.3%	Insufficient Data
Net Profit Before Tax	0.3%	Insufficient Data
Net Profit After Tax	0.3%	Insufficient Data
OPERATING EXPENSE CONTROL		
Total Operating Expense to Net Sales	27.3%	Insufficient Data
Total Operating Expense to Gross Margin	92.0%	Insufficient Data
Non-People Expense to Net Sales	8.8%	Insufficient Data
Non-People Expense to Gross Margin	29.2%	Insufficient Data
INTEREST EXPENSE		
Interest Expense to Net Sales	2.0%	Insufficient Data
Times Interest Earned	1.2X	Insufficient Data
BALANCE SHEET		
Cash	4.7%	Insufficient Data
Accounts & Notes Receivable, Trade(Net)	30.5%	Insufficient Data
Inventory	48.4%	Insufficient Data
Other Current Assets	4.0%	Insufficient Data
Total Current Assets	87.6%	Insufficient Data
All Other Assets	12.4%	Insufficient Data
Total Assets	100.0%	Insufficient Data
Total Current Liabilities	48.1%	Insufficient Data
Total Long-Term Liabilities	21.7%	Insufficient Data
Total Liabilities	69.7%	Insufficient Data
Total Net Worth	30.3%	Insufficient Data
Total Liabilities & Net Worth	100.0%	Insufficient Data

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

INDUSTRIAL P-V-F FIRMS -- SALES $4,000,000 TO $12,000,000

	TYPICAL	MIDDLE RANGE
OVERALL PERFORMANCE		
Net Profit After Tax to Net Worth	9.94%	4.38 - 17.49%
Total Assets to Net Worth	2.03X	1.41 - 3.74X
Net Profit After Tax to Total Assets	5.00%	2.19 - 7.49%
Net Sales to Total Assets	2.74X	2.28 - 3.27X
Net Profit After Tax to Net Sales	1.60%	0.90 - 2.90%
Net Profit Before Tax to Net Worth	14.84%	5.12 - 29.09%
Net Profit Before Tax to Total Assets	5.79%	3.04 - 10.22%
EBIT to Total Assets	8.57%	5.29 - 14.50%
SALES ANALYSIS		
Net Sales ($000)	$5,995	$4,703 - 7,693
Percent Sales Change from Prior Year	11.14%	4.10 - 24.49%
Sales Mix:		
Direct Sales	8.9%	3.7 - 16.7%
Warehouse Sales - Counter and Delivery	91.1%	83.3 - 96.3%
TOTAL SALES	100.0%	100.0 - 100.0%
PRODUCT SALES MIX		
Plumbing Supplies & Equipment	5.9%	0.0 - 12.5%
Heating & Cooling Supplies & Equipment	0.5%	0.0 - 0.5%
Industrial P-V-F (Pipes-Valves-Fittings)	85.3%	72.8 - 100.0%
Other Industrial Supplies & Equipment	2.0%	0.0 - 2.0%
Other Products	6.3%	0.0 - 6.3%
TOTAL SALES	100.0%	100.0 - 100.0%
GROSS MARGIN		
Gross Margin on Net Sales	27.8%	21.6 - 31.7%
Gross Margin on Direct Shipments	12.8%	8.0 - 19.1%
Gross Margin on Warehouse Sales	29.2%	24.8 - 33.8%
ASSET AND FINANCIAL MANAGEMENT		
Current Asset Turn (Sales/Current Assets)	2.99X	2.68 - 4.02X
Total Debt to Net Worth	103.5%	41.0 - 274.7%
Current Debt to Net Worth	80.9%	37.5 - 205.8%
Current Assets to Current Debt	2.23X	1.46 - 3.57X
Current Assets Minus Inventory/Curr Debt	0.91X	0.69 - 1.35X
INVOICE/TRANSACTION DATA		
Billing Lines Per Invoice	6.5	4.4 - 8.0
Average Invoice Size	$257	$193 - 342
Average Billing Line	$40.88	$32.11 - 59.37

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

INDUSTRIAL P-V-F FIRMS -- SALES $4,000,000 TO $12,000,000

	TYPICAL	MIDDLE RANGE
PERSONNEL PRODUCTIVITY		
Sales Per Employee	$184,790	$164,532 - 258,824
Gross Margin Per Employee	$53,553	$47,961 - 58,631
Average Compensation Per Employee	$25,354	$23,447 - 27,822
Average Fringe Benefits Per Employee	$4,471	$3,636 - 6,874
Compensation & Fringes Per Employee	$30,432	$27,322 - 33,633
Payroll to Net Sales	14.2%	10.8 - 15.8%
Fringe Benefits to Net Sales	2.6%	2.0 - 3.2%
Payroll & Fringes to Net Sales	17.0%	13.0 - 19.0%
Payroll to Gross Margin	49.6%	46.5 - 53.3%
Fringe Benefits to Gross Margin	9.3%	6.7 - 11.2%
Payroll & Fringes to Gross Margin	58.4%	54.2 - 62.7%
INVENTORY MANAGEMENT		
Cost of Whse Goods Sold to Ave Inventory	3.26X	2.67 - 3.90X
No. of Days Average Inventory Carried	112 Days	94 - 137 Days
Total Cost of Goods Sold to Ave Inventory	4.06X	3.02 - 4.82X
Whse Gross Margin Return on Ave Inventory	132%	115 - 195%
Turn & Earn Profitability Index	92%	80 - 123%
Percent of Firms on LIFO	50.00%	
ACCOUNTS RECEIVABLE		
Average Collection Period	39 Days	32 - 52 Days
Gross Margin Return on Receivables	217%	171 - 290%
Aging of Receivable Dollars:		
Current (0-30 Days Outstanding)	59.1%	48.1 - 74.5%
31-60 Days Outstanding	25.3%	17.3 - 28.5%
61-90 Days Outstanding	8.8%	5.4 - 12.1%
Over 90 Days Outstanding	6.9%	1.4 - 10.8%
Total	100.0%	100.0 - 100.0%
Average Account Balance:		
Current (0-30 Days Outstanding)	$2,181	$901 - 3,366
31-60 Days Outstanding	$1,348	$854 - 2,605
61-90 Days Outstanding	$940	$871 - 2,315
Over 90 Days Outstanding	$861	$522 - 3,187
Total	$1,797	$838 - 3,011
Aging of Receivable Accounts:		
Current (0-30 Days Outstanding)	54.2%	37.0 - 68.8%
31-60 Days Outstanding	24.9%	20.1 - 28.6%
61-90 Days Outstanding	10.8%	6.1 - 15.3%
Over 90 Days Outstanding	10.1%	2.7 - 17.3%
Total	100.0%	100.0 - 100.0%

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

INDUSTRIAL P-V-F FIRMS -- SALES $4,000,000 TO $12,000,000

	TYPICAL	MIDDLE RANGE
INCOME STATEMENT		
Net Sales	100.0%	100.0 - 100.0%
Cost of Goods Sold	71.9%	68.3 - 78.4%
Gross Margin	27.8%	21.6 - 31.7%
Operating Expenses:		
Selling Expenses	7.2%	5.0 - 9.1%
Delivery Expenses	2.8%	1.6 - 3.1%
Warehouse Expenses	2.8%	1.6 - 3.8%
General & Administrative Expenses	8.5%	5.9 - 10.9%
Occupancy Expenses	1.2%	0.8 - 1.3%
Other Operating Expenses	0.0%	0.0 - 0.5%
Total Operating Expenses	23.2%	19.2 - 28.2%
Net Operating Profit	3.3%	2.5 - 7.4%
Non-Operating Income	1.3%	0.6 - 1.7%
Non-Operating Expenses	1.8%	1.1 - 2.2%
Net Profit Before Tax	2.3%	1.6 - 7.5%
Net Profit After Tax	1.6%	0.9 - 2.9%
OPERATING EXPENSE CONTROL		
Total Operating Expense to Net Sales	23.2%	19.2 - 28.2%
Total Operating Expense to Gross Margin	88.0%	74.6 - 91.6%
Non-People Expense to Net Sales	7.3%	5.9 - 8.7%
Non-People Expense to Gross Margin	28.7%	21.8 - 32.3%
INTEREST EXPENSE		
Interest Expense to Net Sales	0.8%	0.4 - 1.4%
Times Interest Earned	3.2X	2.0 - 6.3X
BALANCE SHEET		
Cash	5.4%	0.9 - 6.8%
Accounts & Notes Receivable, Trade(Net)	32.5%	25.8 - 37.8%
Inventory	49.6%	39.1 - 62.1%
Other Current Assets	1.6%	0.2 - 2.6%
Total Current Assets	89.1%	82.4 - 93.9%
All Other Assets	10.9%	6.1 - 17.6%
Total Assets	100.0%	100.0 - 100.0%
Total Current Liabilities	40.3%	19.3 - 55.0%
Total Long-Term Liabilities	6.9%	0.0 - 12.3%
Total Liabilities	47.3%	26.2 - 69.2%
Total Net Worth	52.7%	30.8 - 73.3%
Total Liabilities & Net Worth	100.0%	100.0 - 100.0%

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

INDUSTRIAL P-V-F FIRMS -- SALES OVER $12,000,000

	TYPICAL	MIDDLE RANGE
OVERALL PERFORMANCE		
Net Profit After Tax to Net Worth	7.72%	1.97 - 11.08%
Total Assets to Net Worth	1.66X	1.36 - 2.55X
Net Profit After Tax to Total Assets	3.56%	0.56 - 7.13%
Net Sales to Total Assets	2.28X	2.19 - 2.92X
Net Profit After Tax to Net Sales	1.40%	0.40 - 2.90%
Net Profit Before Tax to Net Worth	10.56%	2.84 - 16.97%
Net Profit Before Tax to Total Assets	6.35%	0.71 - 8.41%
EBIT to Total Assets	7.80%	4.76 - 10.23%
SALES ANALYSIS		
Net Sales ($000)	$23,148	$17,669 - 32,467
Percent Sales Change from Prior Year	4.83%	-3.14 - 14.99%
Sales Mix:		
Direct Sales	18.4%	10.1 - 26.4%
Warehouse Sales - Counter and Delivery	81.6%	73.5 - 89.9%
TOTAL SALES	100.0%	100.0 - 100.0%
PRODUCT SALES MIX		
Plumbing Supplies & Equipment	7.1%	0.0 - 13.0%
Heating & Cooling Supplies & Equipment	4.7%	0.0 - 9.1%
Industrial P-V-F (Pipes-Valves-Fittings)	83.6%	72.1 - 100.0%
Other Industrial Supplies & Equipment	3.3%	0.0 - 10.0%
Other Products	1.3%	0.0 - 1.3%
TOTAL SALES	100.0%	100.0 - 100.0%
GROSS MARGIN		
Gross Margin on Net Sales	23.2%	21.0 - 27.6%
Gross Margin on Direct Shipments	11.2%	10.8 - 12.3%
Gross Margin on Warehouse Sales	24.6%	23.3 - 28.6%
ASSET AND FINANCIAL MANAGEMENT		
Current Asset Turn (Sales/Current Assets)	2.87X	2.43 - 3.66X
Total Debt to Net Worth	66.4%	35.8 - 154.6%
Current Debt to Net Worth	55.7%	30.6 - 76.4%
Current Assets to Current Debt	2.51X	2.31 - 3.83X
Current Assets Minus Inventory/Curr Debt	1.39X	0.99 - 1.64X
INVOICE/TRANSACTION DATA		
Billing Lines Per Invoice	4.5	3.0 - 5.0
Average Invoice Size	$404	$292 - 483
Average Billing Line	$90.09	$58.66 - 133.05

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

INDUSTRIAL P-V-F FIRMS -- SALES OVER $12,000,000

	TYPICAL	MIDDLE RANGE
PERSONNEL PRODUCTIVITY		
Sales Per Employee	$252,407	$222,577 - 284,264
Gross Margin Per Employee	$60,560	$46,713 - 64,898
Average Compensation Per Employee	$24,444	$21,831 - 30,189
Average Fringe Benefits Per Employee	$4,891	$4,005 - 6,748
Compensation & Fringes Per Employee	$29,822	$25,596 - 36,992
Payroll to Net Sales	10.3%	8.9 - 11.5%
Fringe Benefits to Net Sales	2.3%	1.5 - 2.8%
Payroll & Fringes to Net Sales	12.6%	10.2 - 14.6%
Payroll to Gross Margin	46.5%	39.6 - 52.4%
Fringe Benefits to Gross Margin	8.9%	7.6 - 10.8%
Payroll & Fringes to Gross Margin	54.8%	49.6 - 61.2%
INVENTORY MANAGEMENT		
Cost of Whse Goods Sold to Ave Inventory	3.41X	3.00 - 4.49X
No. of Days Average Inventory Carried	107 Days	81 - 122 Days
Total Cost of Goods Sold to Ave Inventory	4.35X	3.83 - 4.93X
Whse Gross Margin Return on Ave Inventory	116%	80 - 143%
Turn & Earn Profitability Index	83%	63 - 105%
Percent of Firms on LIFO	81.82%	
ACCOUNTS RECEIVABLE		
Average Collection Period	51 Days	37 - 54 Days
Gross Margin Return on Receivables	190%	143 - 237%
Aging of Receivable Dollars:		
Current (0-30 Days Outstanding)	58.9%	45.9 - 68.3%
31-60 Days Outstanding	19.4%	16.4 - 24.2%
61-90 Days Outstanding	11.2%	8.7 - 15.4%
Over 90 Days Outstanding	10.4%	3.8 - 15.9%
Total	100.0%	100.0 - 100.0%
Average Account Balance:		
Current (0-30 Days Outstanding)	$2,928	$1,612 - 3,874
31-60 Days Outstanding	$3,590	$2,021 - 4,769
61-90 Days Outstanding	$3,294	$2,321 - 6,799
Over 90 Days Outstanding	$2,487	$1,618 - 5,725
Total	$3,149	$1,768 - 4,148
Aging of Receivable Accounts:		
Current (0-30 Days Outstanding)	66.4%	51.7 - 79.5%
31-60 Days Outstanding	16.4%	11.4 - 21.7%
61-90 Days Outstanding	8.1%	4.1 - 10.9%
Over 90 Days Outstanding	9.1%	3.9 - 11.8%
Total	100.0%	100.0 - 100.0%

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

INDUSTRIAL P-V-F FIRMS -- SALES OVER $12,000,000

	TYPICAL	MIDDLE RANGE
INCOME STATEMENT		
Net Sales	100.0%	100.0 - 100.0%
Cost of Goods Sold	77.9%	72.4 - 79.0%
Gross Margin	23.2%	21.0 - 27.6%
Operating Expenses:		
Selling Expenses	7.2%	6.1 - 8.5%
Delivery Expenses	2.1%	1.6 - 3.2%
Warehouse Expenses	2.5%	2.1 - 4.5%
General & Administrative Expenses	6.1%	4.2 - 8.4%
Occupancy Expenses	1.6%	1.4 - 1.9%
Other Operating Expenses	0.1%	0.0 - 1.3%
Total Operating Expenses	20.6%	18.8 - 25.0%
Net Operating Profit	2.5%	0.5 - 3.6%
Non-Operating Income	1.7%	0.5 - 2.1%
Non-Operating Expenses	2.0%	1.2 - 2.6%
Net Profit Before Tax	1.5%	0.3 - 2.8%
Net Profit After Tax	1.4%	0.4 - 2.9%
OPERATING EXPENSE CONTROL		
Total Operating Expense to Net Sales	20.6%	18.8 - 25.0%
Total Operating Expense to Gross Margin	90.0%	84.8 - 97.0%
Non-People Expense to Net Sales	7.2%	6.5 - 7.9%
Non-People Expense to Gross Margin	34.2%	27.7 - 40.6%
INTEREST EXPENSE		
Interest Expense to Net Sales	0.7%	0.5 - 1.1%
Times Interest Earned	3.2X	2.1 - 7.4X
BALANCE SHEET		
Cash	3.9%	1.2 - 6.6%
Accounts & Notes Receivable, Trade(Net)	30.8%	23.0 - 39.0%
Inventory	45.5%	37.6 - 53.8%
Other Current Assets	1.6%	0.6 - 2.6%
Total Current Assets	81.8%	73.9 - 90.7%
All Other Assets	18.2%	9.3 - 26.1%
Total Assets	100.0%	100.0 - 100.0%
Total Current Liabilities	33.6%	21.7 - 38.7%
Total Long-Term Liabilities	11.5%	3.8 - 21.0%
Total Liabilities	45.2%	32.3 - 60.8%
Total Net Worth	54.8%	39.2 - 67.7%
Total Liabilities & Net Worth	100.0%	100.0 - 100.0%

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

HIGH PROFIT INDUSTRIAL P-V-F FIRMS

	TYPICAL	MIDDLE RANGE
OVERALL PERFORMANCE		
Net Profit After Tax to Net Worth	12.21%	8.92 - 19.61%
Total Assets to Net Worth	1.75X	1.37 - 3.03X
Net Profit After Tax to Total Assets	6.43%	4.83 - 8.74%
Net Sales to Total Assets	2.60X	2.26 - 3.06X
Net Profit After Tax to Net Sales	2.60%	1.60 - 3.10%
Net Profit Before Tax to Net Worth	20.17%	13.50 - 32.79%
Net Profit Before Tax to Total Assets	8.45%	7.07 - 14.18%
EBIT to Total Assets	12.38%	9.65 - 18.97%
SALES ANALYSIS		
Net Sales($000)	$8,032	$4,557 - 18,546
Percent Sales Change from Prior Year	11.14%	4.48 - 21.71%
Sales Mix:		
Direct Sales	13.1%	5.0 - 20.2%
Warehouse Sales - Counter and Delivery	86.9%	79.8 - 95.0%
TOTAL SALES	100.0%	100.0 - 100.0%
PRODUCT SALES MIX		
Plumbing Supplies & Equipment	4.5%	0.0 - 5.0%
Heating & Cooling Supplies & Equipment	2.3%	0.0 - 2.3%
Industrial P-V-F (Pipes-Valves-Fittings)	84.3%	71.3 - 100.0%
Other Industrial Supplies & Equipment	3.9%	0.0 - 10.0%
Other Products	4.9%	0.0 - 3.7%
TOTAL SALES	100.0%	100.0 - 100.0%
GROSS MARGIN		
Gross Margin on Net Sales	29.3%	23.4 - 32.9%
Gross Margin on Direct Shipments	12.4%	10.9 - 20.8%
Gross Margin on Warehouse Sales	28.7%	25.0 - 34.9%
ASSET AND FINANCIAL MANAGEMENT		
Current Asset Turn (Sales/Current Assets)	2.94X	2.56 - 3.77X
Total Debt to Net Worth	75.7%	36.2 - 203.3%
Current Debt to Net Worth	67.5%	31.1 - 153.6%
Current Assets to Current Debt	2.35X	1.72 - 3.90X
Current Assets Minus Inventory/Curr Debt	1.02X	0.82 - 1.76X
INVOICE/TRANSACTION DATA		
Billing Lines Per Invoice	5.0	4.0 - 7.0
Average Invoice Size	$292	$228 - 371
Average Billing Line	$57.09	$40.33 - 76.78

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

HIGH PROFIT INDUSTRIAL P-V-F FIRMS

	TYPICAL	MIDDLE RANGE
PERSONNEL PRODUCTIVITY		
Sales Per Employee	$249,307	$181,263 - 281,997
Gross Margin Per Employee	$60,560	$55,020 - 64,572
Average Compensation Per Employee	$25,198	$24,202 - 29,436
Average Fringe Benefits Per Employee	$4,414	$3,719 - 6,795
Compensation & Fringes Per Employee	$29,520	$27,579 - 35,389
Payroll to Net Sales	13.8%	10.0 - 16.0%
Fringe Benefits to Net Sales	2.6%	1.8 - 3.2%
Payroll & Fringes to Net Sales	15.3%	11.1 - 18.5%
Payroll to Gross Margin	46.5%	40.1 - 50.9%
Fringe Benefits to Gross Margin	9.3%	6.7 - 10.7%
Payroll & Fringes to Gross Margin	54.8%	47.5 - 61.3%
INVENTORY MANAGEMENT		
Cost of Whse Goods Sold to Ave Inventory	3.34X	2.67 - 4.17X
No. of Days Average Inventory Carried	110 Days	87 - 137 Days
Total Cost of Goods Sold to Ave Inventory	4.01X	3.11 - 4.44X
Whse Gross Margin Return on Ave Inventory	136%	112 - 161%
Turn & Earn Profitability Index	91%	77 - 114%
Percent of Firms on LIFO	61.11%	
ACCOUNTS RECEIVABLE		
Average Collection Period	44 Days	34 - 52 Days
Gross Margin Return on Receivables	233%	176 - 338%
Aging of Receivable Dollars:		
Current (0-30 Days Outstanding)	60.2%	49.8 - 71.9%
31-60 Days Outstanding	21.9%	16.9 - 28.1%
61-90 Days Outstanding	11.2%	8.3 - 14.8%
Over 90 Days Outstanding	6.7%	1.2 - 9.4%
Total	100.0%	100.0 - 100.0%
Average Account Balance:		
Current (0-30 Days Outstanding)	$1,814	$883 - 3,252
31-60 Days Outstanding	$2,145	$820 - 4,757
61-90 Days Outstanding	$2,529	$871 - 5,478
Over 90 Days Outstanding	$1,386	$448 - 3,222
Total	$1,202	$831 - 3,895
Aging of Receivable Accounts:		
Current (0-30 Days Outstanding)	61.6%	48.7 - 75.9%
31-60 Days Outstanding	21.0%	15.3 - 25.7%
61-90 Days Outstanding	8.8%	5.7 - 11.6%
Over 90 Days Outstanding	8.6%	3.4 - 14.3%
Total	100.0%	100.0 - 100.0%

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

HIGH PROFIT INDUSTRIAL P-V-F FIRMS

	TYPICAL	MIDDLE RANGE
INCOME STATEMENT		
Net Sales	100.0%	100.0 - 100.0%
Cost of Goods Sold	71.8%	67.1 - 76.6%
Gross Margin	29.3%	23.4 - 32.9%
Operating Expenses:		
Selling Expenses	6.6%	4.8 - 9.1%
Delivery Expenses	2.7%	1.6 - 3.5%
Warehouse Expenses	2.9%	1.9 - 5.0%
~~General & Administrative Expenses~~	~~8.6%~~	~~6.6 - 10.3%~~
Occupancy Expenses	1.4%	1.2 - 2.3%
Other Operating Expenses	0.0%	0.0 - 0.0%
Total Operating Expenses	23.2%	19.1 - 27.7%
Net Operating Profit	3.8%	3.1 - 6.5%
Non-Operating Income	1.3%	0.6 - 2.0%
Non-Operating Expenses	1.9%	1.1 - 2.2%
Net Profit Before Tax	3.1%	2.4 - 6.8%
Net Profit After Tax	2.6%	1.6 - 3.1%
OPERATING EXPENSE CONTROL		
Total Operating Expense to Net Sales	23.2%	19.1 - 27.7%
Total Operating Expense to Gross Margin	84.8%	75.7 - 90.6%
Non-People Expense to Net Sales	7.2%	5.8 - 8.4%
Non-People Expense to Gross Margin	27.2%	22.3 - 30.8%
INTEREST EXPENSE		
Interest Expense to Net Sales	0.7%	0.5 - 1.6%
Times Interest Earned	5.8X	2.9 - 13.9X
BALANCE SHEET		
Cash	5.4%	1.4 - 6.8%
Accounts & Notes Receivable, Trade(Net)	31.8%	25.0 - 40.7%
Inventory	50.5%	40.2 - 61.2%
Other Current Assets	1.6%	0.6 - 2.8%
Total Current Assets	89.3%	85.6 - 93.4%
All Other Assets	10.7%	6.6 - 14.4%
Total Assets	100.0%	100.0 - 100.0%
Total Current Liabilities	37.2%	19.3 - 46.0%
Total Long-Term Liabilities	10.9%	0.8 - 21.5%
Total Liabilities	48.0%	26.2 - 69.3%
Total Net Worth	51.9%	30.7 - 73.3%
Total Liabilities & Net Worth	100.0%	100.0 - 100.0%

Plumbing Supplies & Equipment

and Industrial P-V-F Firms

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

PLUMBING SUPPLIES & EQUIPMENT & INDUSTRIAL P-V-F FIRMS

	TYPICAL	MIDDLE RANGE
OVERALL PERFORMANCE		
Net Profit After Tax to Net Worth	6.57%	3.72 - 13.30%
Total Assets to Net Worth	1.80X	1.39 - 2.32X
Net Profit After Tax to Total Assets	4.22%	1.40 - 8.20%
Net Sales to Total Assets	2.64X	2.30 - 3.07X
Net Profit After Tax to Net Sales	1.50%	0.50 - 2.90%
Net Profit Before Tax to Net Worth	9.57%	3.06 - 19.34%
Net Profit Before Tax to Total Assets	5.81%	1.42 - 13.97%
EBIT to Total Assets	7.85%	4.10 - 14.38%
SALES ANALYSIS		
Net Sales($000)	$7,454	$4,713 - 12,740
Percent Sales Change from Prior Year	7.30%	-1.05 - 13.91%
Sales Mix:		
Direct Sales	10.8%	5.0 - 16.0%
Warehouse Sales - Counter and Delivery	89.2%	84.0 - 95.0%
TOTAL SALES	100.0%	100.0 - 100.0%
PRODUCT SALES MIX		
Plumbing Supplies & Equipment	41.6%	34.0 - 50.0%
Heating & Cooling Supplies & Equipment	21.1%	10.0 - 30.0%
Industrial P-V-F (Pipes-Valves-Fittings)	25.9%	15.0 - 38.0%
Other Industrial Supplies & Equipment	4.0%	0.0 - 8.0%
Other Products	7.4%	0.0 - 10.0%
TOTAL SALES	100.0%	100.0 - 100.0%
GROSS MARGIN		
Gross Margin on Net Sales	24.8%	22.3 - 27.5%
Gross Margin on Direct Shipments	12.4%	9.9 - 15.4%
Gross Margin on Warehouse Sales	24.8%	23.5 - 27.1%
ASSET AND FINANCIAL MANAGEMENT		
Current Asset Turn (Sales/Current Assets)	3.13X	2.78 - 3.52X
Total Debt to Net Worth	79.9%	39.3 - 135.5%
Current Debt to Net Worth	64.0%	31.3 - 118.1%
Current Assets to Current Debt	2.38X	1.66 - 3.66X
Current Assets Minus Inventory/Curr Debt	1.22X	0.70 - 1.83X
INVOICE/TRANSACTION DATA		
Billing Lines Per Invoice	5.0	4.3 - 7.9
Average Invoice Size	$162	$118 - 202
Average Billing Line	$25.69	$15.99 - 45.18

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

PLUMBING SUPPLIES & EQUIPMENT & INDUSTRIAL P-V-F FIRMS

	TYPICAL	MIDDLE RANGE
PERSONNEL PRODUCTIVITY		
Sales Per Employee	$191,710	$159,082 - 224,493
Gross Margin Per Employee	$48,154	$39,942 - 54,120
Average Compensation Per Employee	$22,155	$19,571 - 26,719
Average Fringe Benefits Per Employee	$4,265	$3,063 - 5,492
Compensation & Fringes Per Employee	$26,070	$22,464 - 31,746
Payroll to Net Sales	12.0%	10.5 - 13.5%
Fringe Benefits to Net Sales	2.2%	1.8 - 2.9%
Payroll & Fringes to Net Sales	14.2%	12.1 - 16.4%
Payroll to Gross Margin	50.5%	44.6 - 53.8%
Fringe Benefits to Gross Margin	9.6%	7.5 - 11.0%
Payroll & Fringes to Gross Margin	58.5%	53.5 - 64.2%
INVENTORY MANAGEMENT		
Cost of Whse Goods Sold to Ave Inventory	3.72X	3.14 - 4.92X
No. of Days Average Inventory Carried	98 Days	74 - 116 Days
Total Cost of Goods Sold to Ave Inventory	4.52X	3.59 - 5.95X
Whse Gross Margin Return on Ave Inventory	127%	101 - 161%
Turn & Earn Profitability Index	99%	76 - 129%
Percent of Firms on LIFO	42.86%	
ACCOUNTS RECEIVABLE		
Average Collection Period	51 Days	42 - 58 Days
Gross Margin Return on Receivables	184%	146 - 214%
Aging of Receivable Dollars:		
Current (0-30 Days Outstanding)	66.1%	55.8 - 78.9%
31-60 Days Outstanding	17.7%	12.3 - 22.6%
61-90 Days Outstanding	7.4%	3.6 - 9.8%
Over 90 Days Outstanding	8.9%	5.5 - 11.3%
Total	100.0%	100.0 - 100.0%
Average Account Balance:		
Current (0-30 Days Outstanding)	$1,052	$818 - 1,666
31-60 Days Outstanding	$1,519	$857 - 2,422
61-90 Days Outstanding	$1,355	$689 - 2,340
Over 90 Days Outstanding	$1,405	$902 - 2,496
Total	$1,252	$944 - 1,913
Aging of Receivable Accounts:		
Current (0-30 Days Outstanding)	67.4%	58.0 - 78.1%
31-60 Days Outstanding	16.2%	11.5 - 21.4%
61-90 Days Outstanding	7.6%	3.8 - 10.4%
Over 90 Days Outstanding	8.9%	4.6 - 12.0%
Total	100.0%	100.0 - 100.0%

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

PLUMBING SUPPLIES & EQUIPMENT & INDUSTRIAL P-V-F FIRMS

	TYPICAL	MIDDLE RANGE
INCOME STATEMENT		
Net Sales	100.0%	100.0 - 100.0%
Cost of Goods Sold	75.6%	72.5 - 77.7%
Gross Margin	24.8%	22.3 - 27.5%
Operating Expenses:		
Selling Expenses	6.5%	4.1 - 7.9%
Delivery Expenses	1.7%	1.0 - 2.2%
Warehouse Expenses	2.9%	2.3 - 3.5%
General & Administrative Expenses	9.2%	8.2 - 10.9%
Occupancy Expenses	1.7%	1.0 - 2.7%
Other Operating Expenses	0.0%	0.0 - 0.4%
Total Operating Expenses	21.7%	19.3 - 24.9%
Net Operating Profit	1.8%	0.6 - 3.1%
Non-Operating Income	2.0%	1.2 - 2.3%
Non-Operating Expenses	1.4%	0.9 - 2.3%
Net Profit Before Tax	1.8%	0.3 - 3.2%
Net Profit After Tax	1.5%	0.5 - 2.9%
OPERATING EXPENSE CONTROL		
Total Operating Expense to Net Sales	21.7%	19.3 - 24.9%
Total Operating Expense to Gross Margin	93.1%	86.6 - 97.5%
Non-People Expense to Net Sales	7.7%	6.3 - 8.7%
Non-People Expense to Gross Margin	32.0%	27.9 - 36.9%
INTEREST EXPENSE		
Interest Expense to Net Sales	0.6%	0.3 - 1.5%
Times Interest Earned	5.7X	1.3 - 13.1X
BALANCE SHEET		
Cash	5.1%	0.4 - 8.5%
Accounts & Notes Receivable, Trade(Net)	34.1%	27.0 - 38.5%
Inventory	45.0%	37.2 - 55.0%
Other Current Assets	2.0%	0.2 - 2.0%
Total Current Assets	86.2%	80.5 - 91.1%
All Other Assets	13.8%	8.9 - 19.5%
Total Assets	100.0%	100.0 - 100.0%
Total Current Liabilities	35.5%	21.7 - 46.8%
Total Long-Term Liabilities	7.5%	0.0 - 12.9%
Total Liabilities	43.0%	27.6 - 54.2%
Total Net Worth	57.0%	45.8 - 72.4%
Total Liabilities & Net Worth	100.0%	100.0 - 100.0%

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

PLUMBING SUPPLIES & INDUSTRIAL P-V-F FIRMS -- SALES UNDER $3,000,000

	TYPICAL	MIDDLE RANGE
OVERALL PERFORMANCE		
Net Profit After Tax to Net Worth		Insufficient Data
Total Assets to Net Worth	2.32X	Insufficient Data
Net Profit After Tax to Total Assets		Insufficient Data
Net Sales to Total Assets	2.68X	Insufficient Data
Net Profit After Tax to Net Sales		Insufficient Data
Net Profit Before Tax to Net Worth	-1.84%	Insufficient Data
Net Profit Before Tax to Total Assets	-1.07%	Insufficient Data
EBIT to Total Assets	1.74%	Insufficient Data
SALES ANALYSIS		
Net Sales($000)	$1,622	Insufficient Data
Percent Sales Change from Prior Year	7.40%	Insufficient Data
Sales Mix:		
Direct Sales		Insufficient Data
Warehouse Sales - Counter and Delivery		Insufficient Data
TOTAL SALES	100.0%	Insufficient Data
PRODUCT SALES MIX		
Plumbing Supplies & Equipment	31.8%	Insufficient Data
Heating & Cooling Supplies & Equipment	17.8%	Insufficient Data
Industrial P-V-F (Pipes-Valves-Fittings)	36.4%	Insufficient Data
Other Industrial Supplies & Equipment	6.0%	Insufficient Data
Other Products	8.0%	Insufficient Data
TOTAL SALES	100.0%	Insufficient Data
GROSS MARGIN		
Gross Margin on Net Sales	27.7%	Insufficient Data
Gross Margin on Direct Shipments		Insufficient Data
Gross Margin on Warehouse Sales		Insufficient Data
ASSET AND FINANCIAL MANAGEMENT		
Current Asset Turn (Sales/Current Assets)	2.74X	Insufficient Data
Total Debt to Net Worth	135.5%	Insufficient Data
Current Debt to Net Worth	118.1%	Insufficient Data
Current Assets to Current Debt	1.88X	Insufficient Data
Current Assets Minus Inventory/Curr Debt	0.56X	Insufficient Data
INVOICE/TRANSACTION DATA		
Billing Lines Per Invoice	6.0	Insufficient Data
Average Invoice Size	$100	Insufficient Data
Average Billing Line	$16.02	Insufficient Data

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

PLUMBING SUPPLIES & INDUSTRIAL P-V-F FIRMS -- SALES UNDER $3,000,000

	TYPICAL	MIDDLE RANGE
PERSONNEL PRODUCTIVITY		
Sales Per Employee	$103,522	Insufficient Data
Gross Margin Per Employee	$26,686	Insufficient Data
Average Compensation Per Employee	$13,191	Insufficient Data
Average Fringe Benefits Per Employee	$2,759	Insufficient Data
Compensation & Fringes Per Employee	$15,927	Insufficient Data
Payroll to Net Sales	14.1%	Insufficient Data
Fringe Benefits to Net Sales	3.1%	Insufficient Data
Payroll & Fringes to Net Sales	15.4%	Insufficient Data
Payroll to Gross Margin	51.6%	Insufficient Data
Fringe Benefits to Gross Margin	10.3%	Insufficient Data
Payroll & Fringes to Gross Margin	55.3%	Insufficient Data
INVENTORY MANAGEMENT		
Cost of Whse Goods Sold to Ave Inventory		Insufficient Data
No. of Days Average Inventory Carried		Insufficient Data
Total Cost of Goods Sold to Ave Inventory	2.67X	Insufficient Data
Whse Gross Margin Return on Ave Inventory		Insufficient Data
Turn & Earn Profitability Index		Insufficient Data
Percent of Firms on LIFO	20.00%	
ACCOUNTS RECEIVABLE		
Average Collection Period	47 Days	Insufficient Data
Gross Margin Return on Receivables	226%	Insufficient Data
Aging of Receivable Dollars:		
Current (0-30 Days Outstanding)	70.7%	Insufficient Data
31-60 Days Outstanding	15.0%	Insufficient Data
61-90 Days Outstanding	4.4%	Insufficient Data
Over 90 Days Outstanding	9.9%	Insufficient Data
Total	100.0%	Insufficient Data
Average Account Balance:		
Current (0-30 Days Outstanding)	$965	Insufficient Data
31-60 Days Outstanding	$812	Insufficient Data
61-90 Days Outstanding	$527	Insufficient Data
Over 90 Days Outstanding	$889	Insufficient Data
Total	$967	Insufficient Data
Aging of Receivable Accounts:		
Current (0-30 Days Outstanding)	63.9%	Insufficient Data
31-60 Days Outstanding	17.8%	Insufficient Data
61-90 Days Outstanding	8.5%	Insufficient Data
Over 90 Days Outstanding	9.8%	Insufficient Data
Total	100.0%	Insufficient Data

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

PLUMBING SUPPLIES & INDUSTRIAL P-V-F FIRMS -- SALES UNDER $3,000,000

	TYPICAL	MIDDLE RANGE
INCOME STATEMENT		
Net Sales	100.0%	Insufficient Data
Cost of Goods Sold	73.6%	Insufficient Data
Gross Margin	27.7%	Insufficient Data
Operating Expenses:		
Selling Expenses	7.7%	Insufficient Data
Delivery Expenses	2.7%	Insufficient Data
Warehouse Expenses	2.8%	Insufficient Data
General & Administrative Expenses	9.9%	Insufficient Data
Occupancy Expenses	2.9%	Insufficient Data
Other Operating Expenses	1.9%	Insufficient Data
Total Operating Expenses	25.8%	Insufficient Data
Net Operating Profit	0.4%	Insufficient Data
Non-Operating Income	1.3%	Insufficient Data
Non-Operating Expenses	1.6%	Insufficient Data
Net Profit Before Tax	-0.6%	Insufficient Data
Net Profit After Tax		Insufficient Data
OPERATING EXPENSE CONTROL		
Total Operating Expense to Net Sales	25.8%	Insufficient Data
Total Operating Expense to Gross Margin	98.9%	Insufficient Data
Non-People Expense to Net Sales		Insufficient Data
Non-People Expense to Gross Margin		Insufficient Data
INTEREST EXPENSE		
Interest Expense to Net Sales	1.8%	Insufficient Data
Times Interest Earned	0.5X	Insufficient Data
BALANCE SHEET		
Cash		Insufficient Data
Accounts & Notes Receivable, Trade(Net)		Insufficient Data
Inventory		Insufficient Data
Other Current Assets		Insufficient Data
Total Current Assets		Insufficient Data
All Other Assets		Insufficient Data
Total Assets		Insufficient Data
Total Current Liabilities		Insufficient Data
Total Long-Term Liabilities		Insufficient Data
Total Liabilities		Insufficient Data
Total Net Worth		Insufficient Data
Total Liabilities & Net Worth		Insufficient Data

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

PLUMBING SUPPLIES & INDUSTRIAL P-V-F FIRMS -- SALES $3,000,000 TO $7,000,000

	TYPICAL	MIDDLE RANGE
OVERALL PERFORMANCE		
Net Profit After Tax to Net Worth	8.41%	3.22 - 13.97%
Total Assets to Net Worth	1.73X	1.38 - 2.09X
Net Profit After Tax to Total Assets	4.48%	1.14 - 8.35%
Net Sales to Total Assets	2.55X	1.90 - 2.87X
Net Profit After Tax to Net Sales	1.60%	0.40 - 3.50%
Net Profit Before Tax to Net Worth	12.14%	2.19 - 23.10%
Net Profit Before Tax to Total Assets	5.81%	0.73 - 14.01%
EBIT to Total Assets	8.66%	5.07 - 13.53%
SALES ANALYSIS		
Net Sales($000)	$4,908	$4,587 - 6,612
Percent Sales Change from Prior Year	8.98%	5.99 - 16.90%
Sales Mix:		
Direct Sales	7.6%	1.3 - 13.7%
Warehouse Sales - Counter and Delivery	92.4%	86.3 - 98.7%
TOTAL SALES	100.0%	100.0 - 100.0%
PRODUCT SALES MIX		
Plumbing Supplies & Equipment	45.1%	40.0 - 50.0%
Heating & Cooling Supplies & Equipment	28.5%	25.0 - 35.0%
Industrial P-V-F (Pipes-Valves-Fittings)	17.6%	10.0 - 25.0%
Other Industrial Supplies & Equipment	2.5%	0.0 - 5.0%
Other Products	6.3%	0.0 - 10.0%
TOTAL SALES	100.0%	100.0 - 100.0%
GROSS MARGIN		
Gross Margin on Net Sales	25.0%	23.7 - 26.6%
Gross Margin on Direct Shipments	10.0%	Insufficient Data
Gross Margin on Warehouse Sales	24.9%	Insufficient Data
ASSET AND FINANCIAL MANAGEMENT		
Current Asset Turn (Sales/Current Assets)	3.13X	2.67 - 3.52X
Total Debt to Net Worth	73.4%	37.6 - 109.1%
Current Debt to Net Worth	64.0%	37.6 - 86.1%
Current Assets to Current Debt	2.72X	1.65 - 3.51X
Current Assets Minus Inventory/Curr Debt	1.19X	0.70 - 1.86X
INVOICE/TRANSACTION DATA		
Billing Lines Per Invoice	7.0	5.0 - 11.5
Average Invoice Size	$143	$124 - 162
Average Billing Line	$20.98	$13.03 - 27.65

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

PLUMBING SUPPLIES & INDUSTRIAL P-V-F FIRMS -- SALES $3,000,000 TO $7,000,000

	TYPICAL	MIDDLE RANGE
PERSONNEL PRODUCTIVITY		
Sales Per Employee	$189,564	$162,686 - 233,579
Gross Margin Per Employee	$50,111	$40,444 - 56,835
Average Compensation Per Employee	$23,805	$20,980 - 26,279
Average Fringe Benefits Per Employee	$4,725	$3,656 - 7,029
Compensation & Fringes Per Employee	$28,742	$23,747 - 32,276
Payroll to Net Sales	12.1%	10.9 - 13.9%
Fringe Benefits to Net Sales	2.3%	1.9 - 2.9%
Payroll & Fringes to Net Sales	14.4%	13.2 - 17.8%
Payroll to Gross Margin	50.9%	43.5 - 53.8%
Fringe Benefits to Gross Margin	10.0%	7.4 - 11.6%
Payroll & Fringes to Gross Margin	60.5%	53.5 - 64.7%
INVENTORY MANAGEMENT		
Cost of Whse Goods Sold to Ave Inventory	4.40X	3.36 - 5.01X
No. of Days Average Inventory Carried	84 Days	73 - 109 Days
Total Cost of Goods Sold to Ave Inventory	4.90X	3.30 - 5.87X
Whse Gross Margin Return on Ave Inventory	142%	115 - 161%
Turn & Earn Profitability Index	120%	Insufficient Data
Percent of Firms on LIFO	33.33%	
ACCOUNTS RECEIVABLE		
Average Collection Period	52 Days	43 - 61 Days
Gross Margin Return on Receivables	185%	147 - 211%
Aging of Receivable Dollars:		
Current (0-30 Days Outstanding)	70.2%	59.6 - 82.9%
31-60 Days Outstanding	16.8%	10.5 - 20.9%
61-90 Days Outstanding	6.1%	3.2 - 8.2%
Over 90 Days Outstanding	6.9%	4.8 - 10.9%
Total	100.0%	100.0 - 100.0%
Average Account Balance:		
Current (0-30 Days Outstanding)	$857	Insufficient Data
31-60 Days Outstanding	$1,057	Insufficient Data
61-90 Days Outstanding	$795	Insufficient Data
Over 90 Days Outstanding	$1,275	Insufficient Data
Total	$795	Insufficient Data
Aging of Receivable Accounts:		
Current (0-30 Days Outstanding)	72.6%	Insufficient Data
31-60 Days Outstanding	16.9%	Insufficient Data
61-90 Days Outstanding	6.5%	Insufficient Data
Over 90 Days Outstanding	4.0%	Insufficient Data
Total	100.0%	Insufficient Data

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

PLUMBING SUPPLIES & INDUSTRIAL P-V-F FIRMS -- SALES $3,000,000 TO $7,000,000

	TYPICAL	MIDDLE RANGE
INCOME STATEMENT		
Net Sales	100.0%	100.0 - 100.0%
Cost of Goods Sold	75.4%	73.4 - 76.3%
Gross Margin	25.0%	23.7 - 26.6%
Operating Expenses:		
Selling Expenses	6.7%	4.8 - 8.2%
Delivery Expenses	1.8%	1.1 - 2.1%
Warehouse Expenses	3.0%	2.0 - 3.5%
General & Administrative Expenses	9.9%	8.4 - 12.8%
Occupancy Expenses	2.1%	0.0 - 2.6%
Other Operating Expenses	0.0%	0.0 - 0.0%
Total Operating Expenses	22.9%	21.0 - 25.6%
Net Operating Profit	1.7%	0.3 - 2.4%
Non-Operating Income	2.3%	1.2 - 2.5%
Non-Operating Expenses	1.5%	1.1 - 2.7%
Net Profit Before Tax	1.6%	0.1 - 2.3%
Net Profit After Tax	1.6%	0.4 - 3.5%
OPERATING EXPENSE CONTROL		
Total Operating Expense to Net Sales	22.9%	21.0 - 25.6%
Total Operating Expense to Gross Margin	93.2%	90.2 - 98.6%
Non-People Expense to Net Sales	8.0%	6.6 - 9.2%
Non-People Expense to Gross Margin	31.1%	28.1 - 35.5%
INTEREST EXPENSE		
Interest Expense to Net Sales	0.6%	0.2 - 1.7%
Times Interest Earned	6.0X	1.2 - 58.3X
BALANCE SHEET		
Cash	10.3%	Insufficient Data
Accounts & Notes Receivable, Trade(Net)	31.2%	Insufficient Data
Inventory	40.7%	Insufficient Data
Other Current Assets	0.9%	Insufficient Data
Total Current Assets	83.2%	Insufficient Data
All Other Assets	16.8%	Insufficient Data
Total Assets	100.0%	Insufficient Data
Total Current Liabilities	37.8%	Insufficient Data
Total Long-Term Liabilities	3.6%	Insufficient Data
Total Liabilities	41.4%	Insufficient Data
Total Net Worth	58.6%	Insufficient Data
Total Liabilities & Net Worth	100.0%	Insufficient Data

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

PLUMBING SUPPLIES & INDUSTRIAL P-V-F FIRMS -- SALES OVER $7,000,000

	TYPICAL	MIDDLE RANGE
OVERALL PERFORMANCE		
Net Profit After Tax to Net Worth	7.05%	4.46 - 13.38%
Total Assets to Net Worth	1.68X	1.35 - 2.29X
Net Profit After Tax to Total Assets	4.41%	2.71 - 8.33%
Net Sales to Total Assets	2.73X	2.39 - 3.18X
Net Profit After Tax to Net Sales	1.50%	1.00 - 3.00%
Net Profit Before Tax to Net Worth	12.89%	5.79 - 26.59%
Net Profit Before Tax to Total Assets	7.16%	3.30 - 14.43%
EBIT to Total Assets	8.28%	4.82 - 16.36%
SALES ANALYSIS		
Net Sales($000)	$12,150	$9,429 - 25,881
Percent Sales Change from Prior Year	3.38%	-2.41 - 12.33%
Sales Mix:		
Direct Sales	13.1%	6.2 - 23.4%
Warehouse Sales - Counter and Delivery	86.9%	76.6 - 93.8%
TOTAL SALES	100.0%	100.0 - 100.0%
PRODUCT SALES MIX		
Plumbing Supplies & Equipment	41.4%	33.0 - 50.0%
Heating & Cooling Supplies & Equipment	17.0%	10.0 - 25.0%
Industrial P-V-F (Pipes-Valves-Fittings)	29.1%	16.0 - 40.0%
Other Industrial Supplies & Equipment	4.6%	0.0 - 10.0%
Other Products	8.0%	0.0 - 10.0%
TOTAL SALES	100.0%	100.0 - 100.0%
GROSS MARGIN		
Gross Margin on Net Sales	24.0%	22.3 - 27.2%
Gross Margin on Direct Shipments	13.2%	9.5 - 20.1%
Gross Margin on Warehouse Sales	24.0%	23.2 - 26.7%
ASSET AND FINANCIAL MANAGEMENT		
Current Asset Turn (Sales/Current Assets)	3.18X	2.87 - 3.56X
Total Debt to Net Worth	68.4%	34.9 - 129.3%
Current Debt to Net Worth	58.2%	30.2 - 123.8%
Current Assets to Current Debt	2.75X	1.84 - 3.68X
Current Assets Minus Inventory/Curr-Debt	1.30X	0.86 - 1.83X
INVOICE/TRANSACTION DATA		
Billing Lines Per Invoice	4.5	4.0 - 5.8
Average Invoice Size	$193	$146 - 220
Average Billing Line	$37.51	$23.19 - 52.15

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

PLUMBING SUPPLIES & INDUSTRIAL P-V-F FIRMS -- SALES OVER $7,000,000

	TYPICAL	MIDDLE RANGE
PERSONNEL PRODUCTIVITY		
Sales Per Employee	$210,399	$173,996 - 229,680
Gross Margin Per Employee	$48,892	$44,660 - 54,389
Average Compensation Per Employee	$22,648	$20,421 - 28,125
Average Fringe Benefits Per Employee	$4,229	$3,222 - 5,558
Compensation & Fringes Per Employee	$26,385	$24,250 - 32,573
Payroll to Net Sales	11.4%	9.7 - 13.2%
Fringe Benefits to Net Sales	2.1%	1.8 - 2.6%
Payroll & Fringes to Net Sales	13.5%	11.5 - 16.3%
Payroll to Gross Margin	50.4%	43.3 - 53.4%
Fringe Benefits to Gross Margin	9.3%	7.6 - 10.3%
Payroll & Fringes to Gross Margin	58.5%	51.2 - 63.8%
INVENTORY MANAGEMENT		
Cost of Whse Goods Sold to Ave Inventory	3.73X	3.20 - 6.83X
No. of Days Average Inventory Carried	98 Days	53 - 114 Days
Total Cost of Goods Sold to Ave Inventory	4.52X	3.79 - 7.55X
Whse Gross Margin Return on Ave Inventory	132%	99 - 199%
Turn & Earn Profitability Index	100%	79 - 166%
Percent of Firms on LIFO	54.55%	
ACCOUNTS RECEIVABLE		
Average Collection Period	52 Days	41 - 66 Days
Gross Margin Return on Receivables	166%	141 - 194%
Aging of Receivable Dollars:		
Current (0-30 Days Outstanding)	61.8%	52.2 - 73.9%
31-60 Days Outstanding	19.1%	13.9 - 22.9%
61-90 Days Outstanding	9.1%	6.2 - 11.9%
Over 90 Days Outstanding	10.1%	5.4 - 12.1%
Total	100.0%	100.0 - 100.0%
Average Account Balance:		
Current (0-30 Days Outstanding)	$1,434	$964 - 2,154
31-60 Days Outstanding	$2,389	$1,553 - 2,567
61-90 Days Outstanding	$2,122	$1,193 - 2,925
Over 90 Days Outstanding	$1,597	$1,151 - 3,113
Total	$1,678	$1,193 - 2,083
Aging of Receivable Accounts:		
Current (0-30 Days Outstanding)	66.4%	52.3 - 81.2%
31-60 Days Outstanding	15.5%	10.1 - 19.7%
61-90 Days Outstanding	7.7%	3.8 - 10.5%
Over 90 Days Outstanding	10.4%	5.9 - 12.9%
Total	100.0%	100.0 - 100.0%

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

PLUMBING SUPPLIES & INDUSTRIAL P-V-F FIRMS -- SALES OVER $7,000,000

	TYPICAL	MIDDLE RANGE
INCOME STATEMENT		
Net Sales	100.0%	100.0 - 100.0%
Cost of Goods Sold	77.5%	72.8 - 77.8%
Gross Margin	24.0%	22.3 - 27.2%
Operating Expenses:		
Selling Expenses	5.9%	4.0 - 7.2%
Delivery Expenses	1.7%	0.8 - 2.1%
Warehouse Expenses	2.7%	2.3 - 3.5%
General & Administrative Expenses	8.9%	7.5 - 10.8%
Occupancy Expenses	1.3%	1.0 - 2.0%
Other Operating Expenses	0.0%	0.0 - 0.3%
Total Operating Expenses	20.4%	18.8 - 23.8%
Net Operating Profit	2.2%	0.9 - 4.5%
Non-Operating Income	2.0%	1.2 - 2.5%
Non-Operating Expenses	1.3%	0.6 - 1.9%
Net Profit Before Tax	2.7%	1.2 - 6.0%
Net Profit After Tax	1.5%	1.0 - 3.0%
OPERATING EXPENSE CONTROL		
Total Operating Expense to Net Sales	20.4%	18.8 - 23.8%
Total Operating Expense to Gross Margin	90.5%	81.1 - 95.8%
Non-People Expense to Net Sales	7.4%	6.3 - 8.7%
Non-People Expense to Gross Margin	32.0%	27.9 - 38.8%
INTEREST EXPENSE		
Interest Expense to Net Sales	0.5%	0.3 - 1.0%
Times Interest Earned	6.2X	3.4 - 12.1X
BALANCE SHEET		
Cash	4.2%	0.4 - 5.9%
Accounts & Notes Receivable, Trade(Net)	36.6%	27.6 - 41.0%
Inventory	42.6%	31.6 - 54.4%
Other Current Assets	2.5%	0.2 - 2.5%
Total Current Assets	86.0%	80.5 - 91.1%
All Other Assets	14.0%	8.9 - 19.5%
Total Assets	100.0%	100.0 - 100.0%
Total Current Liabilities	35.1%	21.7 - 46.8%
Total Long-Term Liabilities	5.6%	0.0 - 12.1%
Total Liabilities	40.7%	25.7 - 53.3%
Total Net Worth	59.3%	46.7 - 74.3%
Total Liabilities & Net Worth	100.0%	100.0 - 100.0%

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

HIGH PROFIT PLUMBING SUPPLIES & EQUIPMENT & INDUSTRIAL P-V-F FIRMS

	TYPICAL	MIDDLE RANGE
OVERALL PERFORMANCE		
Net Profit After Tax to Net Worth	10.20%	7.36 - 17.78%
Total Assets to Net Worth	1.65X	1.34 - 1.96X
Net Profit After Tax to Total Assets	7.58%	4.51 - 9.38%
Net Sales to Total Assets	2.66X	2.30 - 3.33X
Net Profit After Tax to Net Sales	2.40%	1.50 - 3.40%
Net Profit Before Tax to Net Worth	19.14%	12.89 - 27.42%
Net Profit Before Tax to Total Assets	12.52%	7.16 - 16.28%
EBIT to Total Assets	14.00%	8.28 - 17.33%
SALES ANALYSIS		
Net Sales($000)	$9,840	$6,542 - 14,644
Percent Sales Change from Prior Year	8.98%	2.42 - 23.34%
Sales Mix:		
Direct Sales	9.0%	4.8 - 13.3%
Warehouse Sales - Counter and Delivery	91.0%	86.7 - 95.2%
TOTAL SALES	100.0%	100.0 - 100.0%
PRODUCT SALES MIX		
Plumbing Supplies & Equipment	43.0%	40.0 - 50.0%
Heating & Cooling Supplies & Equipment	21.4%	10.0 - 30.0%
Industrial P-V-F (Pipes-Valves-Fittings)	28.3%	15.0 - 40.0%
Other Industrial Supplies & Equipment	2.3%	0.0 - 5.0%
Other Products	5.0%	0.0 - 10.0%
TOTAL SALES	100.0%	100.0 - 100.0%
GROSS MARGIN		
Gross Margin on Net Sales	24.7%	22.3 - 27.1%
Gross Margin on Direct Shipments	13.8%	10.0 - 18.8%
Gross Margin on Warehouse Sales	24.6%	23.4 - 28.1%
ASSET AND FINANCIAL MANAGEMENT		
Current Asset Turn (Sales/Current Assets)	3.25X	2.88 - 3.59X
Total Debt to Net Worth	64.8%	34.0 - 95.9%
Current Debt to Net Worth	42.2%	28.9 - 82.7%
Current Assets to Current Debt	2.96X	1.97 - 3.68X
Current Assets Minus Inventory/Curr Debt	1.63X	1.14 - 1.86X
INVOICE/TRANSACTION DATA		
Billing Lines Per Invoice	6.0	4.5 - 9.0
Average Invoice Size	$170	$130 - 202
Average Billing Line	$24.28	$12.00 - 45.18

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

HIGH PROFIT PLUMBING SUPPLIES & EQUIPMENT & INDUSTRIAL P-V-F FIRMS

	TYPICAL	MIDDLE RANGE
PERSONNEL PRODUCTIVITY		
Sales Per Employee	$210,176	$185,215 - 228,910
Gross Margin Per Employee	$51,474	$45,920 - 54,950
Average Compensation Per Employee	$23,096	$21,045 - 28,369
Average Fringe Benefits Per Employee	$4,660	$3,713 - 7,117
Compensation & Fringes Per Employee	$28,086	$25,110 - 32,980
Payroll to Net Sales	11.0%	9.8 - 12.6%
Fringe Benefits to Net Sales	2.2%	1.8 - 3.0%
Payroll & Fringes to Net Sales	13.4%	11.5 - 15.7%
Payroll to Gross Margin	48.1%	39.3 - 51.5%
Fringe Benefits to Gross Margin	9.6%	7.5 - 12.3%
Payroll & Fringes to Gross Margin	55.0%	47.0 - 59.5%
INVENTORY MANAGEMENT		
Cost of Whse Goods Sold to Ave Inventory	4.35X	3.59 - 7.03X
No. of Days Average Inventory Carried	84 Days	52 - 102 Days
Total Cost of Goods Sold to Ave Inventory	5.82X	4.14 - 7.55X
Whse Gross Margin Return on Ave Inventory	151%	122 - 278%
Turn & Earn Profitability Index	105%	90 - 199%
Percent of Firms on LIFO	39.13%	
ACCOUNTS RECEIVABLE		
Average Collection Period	53 Days	44 - 64 Days
Gross Margin Return on Receivables	166%	137 - 192%
Aging of Receivable Dollars:		
Current (0-30 Days Outstanding)	64.4%	51.4 - 82.2%
31-60 Days Outstanding	17.7%	11.8 - 22.4%
61-90 Days Outstanding	7.9%	3.0 - 13.5%
Over 90 Days Outstanding	10.0%	5.6 - 11.2%
Total	100.0%	100.0 - 100.0%
Average Account Balance:		
Current (0-30 Days Outstanding)	$1,508	$1,004 - 2,105
31-60 Days Outstanding	$2,402	$1,123 - 2,931
61-90 Days Outstanding	$2,208	$958 - 3,304
Over 90 Days Outstanding	$1,776	$1,181 - 3,132
Total	$1,739	$1,432 - 2,105
Aging of Receivable Accounts:		
Current (0-30 Days Outstanding)	66.1%	60.4 - 73.9%
31-60 Days Outstanding	15.2%	12.6 - 19.6%
61-90 Days Outstanding	6.7%	4.6 - 8.2%
Over 90 Days Outstanding	12.0%	6.2 - 13.9%
Total	100.0%	100.0 - 100.0%

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

HIGH PROFIT PLUMBING SUPPLIES & EQUIPMENT & INDUSTRIAL P-V-F FIRMS

	TYPICAL	MIDDLE RANGE
INCOME STATEMENT		
Net Sales	100.0%	100.0 - 100.0%
Cost of Goods Sold	76.0%	72.9 - 77.7%
Gross Margin	24.7%	22.3 - 27.1%
Operating Expenses:		
Selling Expenses	5.1%	3.8 - 7.2%
Delivery Expenses	1.9%	0.7 - 2.2%
Warehouse Expenses	2.8%	2.0 - 3.6%
General & Administrative Expenses	9.2%	7.7 - 11.4%
Occupancy Expenses	1.4%	0.0 - 2.0%
Other Operating Expenses	0.0%	0.0 - 0.4%
Total Operating Expenses	20.6%	18.9 - 23.5%
Net Operating Profit	2.9%	1.5 - 5.0%
Non-Operating Income	2.0%	1.2 - 2.8%
Non-Operating Expenses	1.1%	0.7 - 1.4%
Net Profit Before Tax	3.2%	2.4 - 6.4%
Net Profit After Tax	2.4%	1.5 - 3.4%
OPERATING EXPENSE CONTROL		
Total Operating Expense to Net Sales	20.6%	18.9 - 23.5%
Total Operating Expense to Gross Margin	87.7%	79.9 - 93.5%
Non-People Expense to Net Sales	7.3%	6.3 - 8.7%
Non-People Expense to Gross Margin	30.4%	28.0 - 38.0%
INTEREST EXPENSE		
Interest Expense to Net Sales	0.4%	0.2 - 0.6%
Times Interest Earned	11.4X	6.6 - 25.6X
BALANCE SHEET		
Cash	7.1%	1.6 - 13.1%
Accounts & Notes Receivable, Trade(Net)	37.2%	28.4 - 43.3%
Inventory	39.0%	28.4 - 51.3%
Other Current Assets	2.6%	0.1 - 2.6%
Total Current Assets	85.9%	79.8 - 93.0%
All Other Assets	14.1%	7.0 - 20.2%
Total Assets	100.0%	100.0 - 100.0%
Total Current Liabilities	31.1%	21.2 - 43.7%
Total Long-Term Liabilities	4.4%	0.0 - 8.6%
Total Liabilities	35.5%	23.7 - 47.8%
Total Net Worth	64.5%	52.2 - 76.3%
Total Liabilities & Net Worth	100.0%	100.0 - 100.0%

HVAC & Other Emphasis Firms

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

HVAC & OTHER EMPHASIS FIRMS

	TYPICAL	MIDDLE RANGE
OVERALL PERFORMANCE		
Net Profit After Tax to Net Worth	6.44%	3.62 - 11.98%
Total Assets to Net Worth	1.79X	1.40 - 2.53X
Net Profit After Tax to Total Assets	3.91%	1.63 - 5.47%
Net Sales to Total Assets	2.31X	1.96 - 2.88X
Net Profit After Tax to Net Sales	1.60%	0.60 - 2.50%
Net Profit Before Tax to Net Worth	9.34%	3.62 - 16.76%
Net Profit Before Tax to Total Assets	4.59%	1.86 - 9.33%
EBIT to Total Assets	7.47%	3.85 - 10.38%
SALES ANALYSIS		
Net Sales($000)	$4,177	$2,512 - 6,629
Percent Sales Change from Prior Year	7.86%	1.48 - 18.70%
Sales Mix:		
Direct Sales	8.9%	2.8 - 11.6%
Warehouse Sales - Counter and Delivery	91.1%	88.4 - 97.2%
TOTAL SALES	100.0%	100.0 - 100.0%
PRODUCT SALES MIX		
Plumbing Supplies & Equipment	29.7%	20.5 - 40.0%
Heating & Cooling Supplies & Equipment	26.9%	8.8 - 35.0%
Industrial P-V-F (Pipes-Valves-Fittings)	7.0%	0.0 - 10.0%
Other Industrial Supplies & Equipment	6.9%	0.0 - 9.8%
Other Products	29.4%	10.0 - 48.0%
TOTAL SALES	100.0%	100.0 - 100.0%
GROSS MARGIN		
Gross Margin on Net Sales	25.2%	21.7 - 26.9%
Gross Margin on Direct Shipments	13.3%	8.9 - 19.7%
Gross Margin on Warehouse Sales	25.1%	23.7 - 28.4%
ASSET AND FINANCIAL MANAGEMENT		
Current Asset Turn (Sales/Current Assets)	2.63X	2.23 - 3.25X
Total Debt to Net Worth	78.9%	39.5 - 146.3%
Current Debt to Net Worth	50.1%	31.5 - 105.5%
Current Assets to Current Debt	2.80X	1.85 - 3.85X
Current Assets Minus Inventory/Curr Debt	1.03X	0.80 - 1.47X
INVOICE/TRANSACTION DATA		
Billing Lines Per Invoice	5.2	4.2 - 9.3
Average Invoice Size	$130	$77 - 205
Average Billing Line	$21.75	$12.05 - 32.54

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

HVAC & OTHER EMPHASIS FIRMS

	TYPICAL	MIDDLE RANGE
PERSONNEL PRODUCTIVITY		
Sales Per Employee	$166,551	$134,841 - 201,730
Gross Margin Per Employee	$41,029	$35,098 - 47,834
Average Compensation Per Employee	$20,270	$17,705 - 24,466
Average Fringe Benefits Per Employee	$3,627	$2,787 - 5,102
Compensation & Fringes Per Employee	$24,141	$19,999 - 27,260
Payroll to Net Sales	12.1%	10.3 - 14.8%
Fringe Benefits to Net Sales	2.0%	1.7 - 3.1%
Payroll & Fringes to Net Sales	12.7%	9.6 - 16.8%
Payroll to Gross Margin	50.1%	45.5 - 55.3%
Fringe Benefits to Gross Margin	8.8%	7.0 - 11.7%
Payroll & Fringes to Gross Margin	54.9%	42.5 - 64.1%
INVENTORY MANAGEMENT		
Cost of Whse Goods Sold to Ave Inventory	3.07X	2.51 - 3.84X
No. of Days Average Inventory Carried	119 Days	95 - 145 Days
Total Cost of Goods Sold to Ave Inventory	3.39X	2.76 - 4.63X
Whse Gross Margin Return on Ave Inventory	109%	86 - 135%
Turn & Earn Profitability Index	81%	66 - 98%
Percent of Firms on LIFO	50.77%	
ACCOUNTS RECEIVABLE		
Average Collection Period	46 Days	38 - 56 Days
Gross Margin Return on Receivables	199%	158 - 234%
Aging of Receivable Dollars:		
Current (0-30 Days Outstanding)	67.9%	59.9 - 76.0%
31-60 Days Outstanding	15.2%	10.2 - 19.4%
61-90 Days Outstanding	7.2%	4.4 - 8.5%
Over 90 Days Outstanding	9.6%	4.9 - 11.8%
Total	100.0%	100.0 - 100.0%
Average Account Balance:		
Current (0-30 Days Outstanding)	$882	$603 - 1,436
31-60 Days Outstanding	$967	$412 - 1,666
61-90 Days Outstanding	$922	$509 - 1,542
Over 90 Days Outstanding	$1,119	$706 - 2,167
Total	$910	$612 - 1,406
Aging of Receivable Accounts:		
Current (0-30 Days Outstanding)	71.0%	61.6 - 81.1%
31-60 Days Outstanding	16.0%	9.8 - 21.0%
61-90 Days Outstanding	6.7%	4.1 - 9.6%
Over 90 Days Outstanding	6.3%	3.6 - 8.2%
Total	100.0%	100.0 - 100.0%

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

HVAC & OTHER EMPHASIS FIRMS

	TYPICAL	MIDDLE RANGE
INCOME STATEMENT		
Net Sales	100.0%	100.0 - 100.0%
Cost of Goods Sold	76.1%	73.1 - 78.3%
Gross Margin	25.2%	21.7 - 26.9%
Operating Expenses:		
Selling Expenses	6.2%	5.4 - 7.5%
Delivery Expenses	1.7%	1.5 - 2.2%
Warehouse Expenses	2.3%	1.6 - 3.5%
General & Administrative Expenses	9.5%	7.3 - 12.6%
Occupancy Expenses	1.7%	1.2 - 3.0%
Other Operating Expenses	0.0%	0.0 - 0.1%
Total Operating Expenses	22.9%	19.2 - 26.8%
Net Operating Profit	1.6%	0.2 - 3.6%
Non-Operating Income	2.0%	1.1 - 2.8%
Non-Operating Expenses	1.9%	1.3 - 2.5%
Net Profit Before Tax	1.6%	0.6 - 3.8%
Net Profit After Tax	1.6%	0.6 - 2.5%
OPERATING EXPENSE CONTROL		
Total Operating Expense to Net Sales	22.9%	19.2 - 26.8%
Total Operating Expense to Gross Margin	93.9%	85.4 - 99.3%
Non-People Expense to Net Sales	7.5%	6.3 - 8.5%
Non-People Expense to Gross Margin	30.7%	24.5 - 36.2%
INTEREST EXPENSE		
Interest Expense to Net Sales	0.9%	0.4 - 1.9%
Times Interest Earned	2.8X	1.4 - 8.0X
BALANCE SHEET		
Cash	4.8%	0.3 - 4.8%
Accounts & Notes Receivable, Trade(Net)	27.0%	21.8 - 32.8%
Inventory	50.5%	45.3 - 58.5%
Other Current Assets	2.6%	0.3 - 4.1%
Total Current Assets	84.8%	83.6 - 90.6%
All Other Assets	15.2%	9.4 - 16.4%
Total Assets	100.0%	100.0 - 100.0%
Total Current Liabilities	32.6%	21.6 - 43.0%
Total Long-Term Liabilities	14.6%	2.9 - 22.1%
Total Liabilities	47.2%	35.6 - 55.8%
Total Net Worth	52.8%	44.2 - 64.4%
Total Liabilities & Net Worth	100.0%	100.0 - 100.0%

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

HVAC & OTHER FIRMS -- SALES UNDER $3,000,000

	TYPICAL	MIDDLE RANGE
OVERALL PERFORMANCE		
Net Profit After Tax to Net Worth	6.58%	1.09 - 15.53%
Total Assets to Net Worth	1.69X	1.29 - 2.55X
Net Profit After Tax to Total Assets	4.36%	0.77 - 5.80%
Net Sales to Total Assets	2.17X	1.86 - 2.99X
Net Profit After Tax to Net Sales	1.60%	0.40 - 3.20%
Net Profit Before Tax to Net Worth	8.53%	-0.24 - 16.39%
Net Profit Before Tax to Total Assets	4.50%	0.31 - 9.05%
EBIT to Total Assets	7.20%	3.00 - 7.73%
SALES ANALYSIS		
Net Sales($000)	$2,069	$1,108 - 2,524
Percent Sales Change from Prior Year	8.68%	-0.14 - 18.88%
Sales Mix:		
Direct Sales	6.8%	0.0 - 12.6%
Warehouse Sales - Counter and Delivery	93.2%	87.4 - 100.0%
TOTAL SALES	100.0%	100.0 - 100.0%
PRODUCT SALES MIX		
Plumbing Supplies & Equipment	31.2%	23.0 - 40.0%
Heating & Cooling Supplies & Equipment	32.4%	1.8 - 53.8%
Industrial P-V-F (Pipes-Valves-Fittings)	3.7%	0.0 - 10.0%
Other Industrial Supplies & Equipment	3.0%	0.0 - 5.0%
Other Products	29.7%	0.0 - 50.0%
TOTAL SALES	100.0%	100.0 - 100.0%
GROSS MARGIN		
Gross Margin on Net Sales	28.4%	23.8 - 31.3%
Gross Margin on Direct Shipments	14.3%	Insufficient Data
Gross Margin on Warehouse Sales	27.6%	24.3 - 32.9%
ASSET AND FINANCIAL MANAGEMENT		
Current Asset Turn (Sales/Current Assets)	2.45X	2.21 - 3.28X
Total Debt to Net Worth	59.7%	28.6 - 148.6%
Current Debt to Net Worth	43.6%	26.1 - 114.8%
Current Assets to Current Debt	2.74X	1.73 - 5.75X
Current Assets Minus Inventory/Curr Debt	1.04X	0.78 - 1.64X
INVOICE/TRANSACTION DATA		
Billing Lines Per Invoice	6.0	4.0 - 10.0
Average Invoice Size	$91	$44 - 139
Average Billing Line	$12.05	$6.42 - 24.45

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

HVAC & OTHER FIRMS -- SALES UNDER $3,000,000

	TYPICAL	MIDDLE RANGE
PERSONNEL PRODUCTIVITY		
Sales Per Employee	$153,623	$120,585 - 184,443
Gross Margin Per Employee	$41,914	$34,786 - 49,265
Average Compensation Per Employee	$19,931	$17,291 - 24,832
Average Fringe Benefits Per Employee	$3,473	$2,489 - 5,225
Compensation & Fringes Per Employee	$24,295	$17,453 - 27,715
Payroll to Net Sales	13.4%	12.2 - 16.4%
Fringe Benefits to Net Sales	2.1%	1.6 - 3.3%
Payroll & Fringes to Net Sales	13.9%	0.0 - 16.9%
Payroll to Gross Margin	50.2%	46.7 - 53.9%
Fringe Benefits to Gross Margin	8.0%	6.1 - 11.7%
Payroll & Fringes to Gross Margin	52.4%	0.0 - 60.0%
INVENTORY MANAGEMENT		
Cost of Whse Goods Sold to Ave Inventory	2.79X	1.95 - 3.46X
No. of Days Average Inventory Carried	131 Days	107 - 192 Days
Total Cost of Goods Sold to Ave Inventory	3.19X	2.46 - 4.08X
Whse Gross Margin Return on Ave Inventory	116%	83 - 133%
Turn & Earn Profitability Index	84%	61 - 97%
Percent of Firms on LIFO	28.57%	
ACCOUNTS RECEIVABLE		
Average Collection Period	48 Days	37 - 63 Days
Gross Margin Return on Receivables	223%	148 - 305%
Aging of Receivable Dollars:		
Current (0-30 Days Outstanding)	62.6%	55.9 - 73.4%
31-60 Days Outstanding	15.1%	9.8 - 19.4%
61-90 Days Outstanding	9.7%	3.9 - 13.9%
Over 90 Days Outstanding	12.6%	6.2 - 16.2%
Total	100.0%	100.0 - 100.0%
Average Account Balance:		
Current (0-30 Days Outstanding)	$619	$287 - 1,836
31-60 Days Outstanding	$524	$354 - 1,151
61-90 Days Outstanding	$931	$504 - 2,181
Over 90 Days Outstanding	$1,141	$529 - 3,161
Total	$590	$257 - 1,350
Aging of Receivable Accounts:		
Current (0-30 Days Outstanding)	67.2%	57.9 - 72.5%
31-60 Days Outstanding	19.1%	14.0 - 23.8%
61-90 Days Outstanding	6.9%	4.7 - 9.6%
Over 90 Days Outstanding	6.7%	3.8 - 8.5%
Total	100.0%	100.0 - 100.0%

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

HVAC & OTHER FIRMS -- SALES UNDER $3,000,000

	TYPICAL	MIDDLE RANGE
INCOME STATEMENT		
Net Sales	100.0%	100.0 - 100.0%
Cost of Goods Sold	72.1%	68.6 - 76.3%
Gross Margin	28.4%	23.8 - 31.3%
Operating Expenses:		
Selling Expenses	5.8%	4.7 - 11.2%
Delivery Expenses	1.8%	1.3 - 2.5%
Warehouse Expenses	1.6%	0.6 - 2.4%
General & Administrative Expenses	13.7%	9.8 - 17.5%
Occupancy Expenses	1.6%	1.2 - 3.2%
Other Operating Expenses	0.0%	0.0 - 0.2%
Total Operating Expenses	27.9%	22.9 - 29.7%
Net Operating Profit	3.0%	0.0 - 3.9%
Non-Operating Income	1.9%	0.2 - 2.7%
Non-Operating Expenses	1.8%	0.3 - 2.5%
Net Profit Before Tax	2.2%	0.8 - 3.8%
Net Profit After Tax	1.6%	0.4 - 3.2%
OPERATING EXPENSE CONTROL		
Total Operating Expense to Net Sales	27.9%	22.9 - 29.7%
Total Operating Expense to Gross Margin	89.9%	85.4 - 100.0%
Non-People Expense to Net Sales	7.3%	6.0 - 11.6%
Non-People Expense to Gross Margin	34.1%	21.5 - 35.9%
INTEREST EXPENSE		
Interest Expense to Net Sales	1.1%	0.3 - 2.1%
Times Interest Earned	3.7X	0.9 - 7.2X
BALANCE SHEET		
Cash	4.2%	1.3 - 4.2%
Accounts & Notes Receivable, Trade(Net)	22.1%	14.2 - 27.5%
Inventory	53.6%	53.4 - 59.5%
Other Current Assets	2.9%	0.4 - 6.3%
Total Current Assets	82.7%	82.7 - 88.3%
All Other Assets	17.3%	11.7 - 17.3%
Total Assets	100.0%	100.0 - 100.0%
Total Current Liabilities	33.0%	19.7 - 37.9%
Total Long-Term Liabilities	14.5%	1.7 - 32.5%
Total Liabilities	47.4%	26.2 - 62.9%
Total Net Worth	52.6%	37.1 - 73.8%
Total Liabilities & Net Worth	100.0%	100.0 - 100.0%

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

HVAC & OTHER FIRMS -- SALES $3,000,000 TO $8,000,000

	TYPICAL	MIDDLE RANGE
OVERALL PERFORMANCE		
Net Profit After Tax to Net Worth	5.85%	3.65 - 11.99%
Total Assets to Net Worth	1.87X	1.50 - 2.75X
Net Profit After Tax to Total Assets	3.31%	1.62 - 5.82%
Net Sales to Total Assets	2.42X	1.96 - 2.82X
Net Profit After Tax to Net Sales	1.30%	0.50 - 2.30%
Net Profit Before Tax to Net Worth	9.32%	3.62 - 17.52%
Net Profit Before Tax to Total Assets	4.05%	1.81 - 9.60%
EBIT to Total Assets	6.93%	2.18 - 9.54%
SALES ANALYSIS		
Net Sales ($000)	$4,676	$3,820 - 6,299
Percent Sales Change from Prior Year	9.22%	1.71 - 26.07%
Sales Mix:		
Direct Sales	7.4%	2.5 - 11.7%
Warehouse Sales - Counter and Delivery	92.6%	88.3 - 97.5%
TOTAL SALES	100.0%	100.0 - 100.0%
PRODUCT SALES MIX		
Plumbing Supplies & Equipment	26.9%	13.0 - 40.0%
Heating & Cooling Supplies & Equipment	24.6%	9.8 - 35.0%
Industrial P-V-F (Pipes-Valves-Fittings)	10.8%	0.0 - 17.0%
Other Industrial Supplies & Equipment	10.0%	0.0 - 19.3%
Other Products	27.6%	10.0 - 44.6%
TOTAL SALES	100.0%	100.0 - 100.0%
GROSS MARGIN		
Gross Margin on Net Sales	24.3%	21.3 - 25.5%
Gross Margin on Direct Shipments	13.0%	8.4 - 29.2%
Gross Margin on Warehouse Sales	24.8%	23.3 - 28.9%
ASSET AND FINANCIAL MANAGEMENT		
Current Asset Turn (Sales/Current Assets)	2.62X	2.17 - 2.96X
Total Debt to Net Worth	86.9%	50.1 - 174.5%
Current Debt to Net Worth	60.1%	32.6 - 149.9%
Current Assets to Current Debt	2.74X	1.84 - 3.66X
Current Assets Minus Inventory/Curr Debt	0.97X	0.78 - 1.63X
INVOICE/TRANSACTION DATA		
Billing Lines Per Invoice	5.0	5.0 - 9.5
Average Invoice Size	$149	$83 - 208
Average Billing Line	$21.84	$16.17 - 33.29

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

HVAC & OTHER FIRMS -- SALES $3,000,000 TO $8,000,000

	TYPICAL	MIDDLE RANGE
PERSONNEL PRODUCTIVITY		
Sales Per Employee	$158,324	$134,992 - 196,249
Gross Margin Per Employee	$37,034	$33,278 - 44,643
Average Compensation Per Employee	$19,652	$17,550 - 22,234
Average Fringe Benefits Per Employee	$3,985	$2,799 - 4,948
Compensation & Fringes Per Employee	$22,888	$20,173 - 26,690
Payroll to Net Sales	11.7%	10.3 - 14.5%
Fringe Benefits to Net Sales	2.1%	1.7 - 3.3%
Payroll & Fringes to Net Sales	12.6%	10.0 - 16.9%
Payroll to Gross Margin	51.0%	45.2 - 57.2%
Fringe Benefits to Gross Margin	9.2%	7.3 - 12.3%
Payroll & Fringes to Gross Margin	55.5%	42.4 - 64.5%
INVENTORY MANAGEMENT		
Cost of Whse Goods Sold to Ave Inventory	3.05X	2.39 - 4.45X
No. of Days Average Inventory Carried	120 Days	84 - 154 Days
Total Cost of Goods Sold to Ave Inventory	3.30X	2.86 - 5.23X
Whse Gross Margin Return on Ave Inventory	106%	83 - 138%
Turn & Earn Profitability Index	81%	66 - 108%
Percent of Firms on LIFO	50.00%	
ACCOUNTS RECEIVABLE		
Average Collection Period	44 Days	37 - 50 Days
Gross Margin Return on Receivables	197%	179 - 235%
Aging of Receivable Dollars:		
Current (0-30 Days Outstanding)	69.9%	62.0 - 77.8%
31-60 Days Outstanding	14.5%	11.8 - 19.2%
61-90 Days Outstanding	6.1%	4.1 - 7.6%
Over 90 Days Outstanding	9.5%	3.1 - 14.5%
Total	100.0%	100.0 - 100.0%
Average Account Balance:		
Current (0-30 Days Outstanding)	$896	$650 - 1,265
31-60 Days Outstanding	$1,058	$454 - 1,666
61-90 Days Outstanding	$769	$417 - 1,369
Over 90 Days Outstanding	$1,098	$569 - 2,241
Total	$903	$637 - 1,254
Aging of Receivable Accounts:		
Current (0-30 Days Outstanding)	71.3%	56.6 - 84.6%
31-60 Days Outstanding	15.3%	9.5 - 21.2%
61-90 Days Outstanding	7.0%	3.3 - 12.2%
Over 90 Days Outstanding	6.4%	3.4 - 8.9%
Total	100.0%	100.0 - 100.0%

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

HVAC & OTHER FIRMS -- SALES $3,000,000 TO $8,000,000

	TYPICAL	MIDDLE RANGE
INCOME STATEMENT		
Net Sales	100.0%	100.0 - 100.0%
Cost of Goods Sold	76.5%	74.5 - 78.7%
Gross Margin	24.3%	21.3 - 25.5%
Operating Expenses:		
Selling Expenses	6.4%	5.4 - 7.2%
Delivery Expenses	1.6%	1.5 - 2.2%
Warehouse Expenses	2.4%	1.9 - 3.7%
General & Administrative Expenses	9.1%	7.9 - 10.9%
Occupancy Expenses	1.9%	1.1 - 3.0%
Other Operating Expenses	0.0%	0.0 - 0.1%
Total Operating Expenses	20.7%	19.2 - 24.7%
Net Operating Profit	1.2%	0.0 - 3.6%
Non-Operating Income	2.4%	1.3 - 3.4%
Non-Operating Expenses	2.3%	1.5 - 3.0%
Net Profit Before Tax	1.3%	0.5 - 2.3%
Net Profit After Tax	1.3%	0.5 - 2.3%
OPERATING EXPENSE CONTROL		
Total Operating Expense to Net Sales	20.7%	19.2 - 24.7%
Total Operating Expense to Gross Margin	94.1%	84.8 - 100.1%
Non-People Expense to Net Sales	7.7%	7.3 - 8.3%
Non-People Expense to Gross Margin	33.5%	29.4 - 37.0%
INTEREST EXPENSE		
Interest Expense to Net Sales	0.8%	0.3 - 2.0%
Times Interest Earned	2.0X	1.4 - 12.3X
BALANCE SHEET		
Cash	7.5%	0.1 - 14.0%
Accounts & Notes Receivable, Trade(Net)	27.6%	23.0 - 31.3%
Inventory	49.3%	40.8 - 59.3%
Other Current Assets	3.1%	0.2 - 4.4%
Total Current Assets	87.6%	85.2 - 93.9%
All Other Assets	12.4%	6.1 - 14.8%
Total Assets	100.0%	100.0 - 100.0%
Total Current Liabilities	33.8%	19.9 - 50.7%
Total Long-Term Liabilities	13.9%	0.0 - 21.7%
Total Liabilities	47.7%	37.5 - 58.2%
Total Net Worth	52.3%	41.8 - 62.5%
Total Liabilities & Net Worth	100.0%	100.0 - 100.0%

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

HVAC & OTHER FIRMS -- SALES OVER $8,000,000

	TYPICAL	MIDDLE RANGE
OVERALL PERFORMANCE		
Net Profit After Tax to Net Worth	6.81%	3.75 - 9.67%
Total Assets to Net Worth	1.85X	1.58 - 2.22X
Net Profit After Tax to Total Assets	4.46%	1.65 - 5.06%
Net Sales to Total Assets	2.43X	2.00 - 2.99X
Net Profit After Tax to Net Sales	1.90%	0.60 - 2.50%
Net Profit Before Tax to Net Worth	12.61%	8.44 - 18.30%
Net Profit Before Tax to Total Assets	7.52%	3.77 - 9.41%
EBIT to Total Assets	9.47%	5.92 - 11.57%
SALES ANALYSIS		
Net Sales($000)	$23,974	$12,645 - 43,822
Percent Sales Change from Prior Year	5.01%	0.98 - 15.53%
Sales Mix:		
Direct Sales	12.8%	6.3 - 18.3%
Warehouse Sales - Counter and Delivery	87.2%	81.7 - 93.7%
TOTAL SALES	100.0%	100.0 - 100.0%
PRODUCT SALES MIX		
Plumbing Supplies & Equipment	33.8%	23.5 - 42.8%
Heating & Cooling Supplies & Equipment	25.5%	6.8 - 41.0%
Industrial P-V-F (Pipes-Valves-Fittings)	3.0%	0.0 - 5.0%
Other Industrial Supplies & Equipment	4.9%	0.0 - 9.5%
Other Products	32.8%	13.5 - 46.5%
TOTAL SALES	100.0%	100.0 - 100.0%
GROSS MARGIN		
Gross Margin on Net Sales	23.2%	19.9 - 25.9%
Gross Margin on Direct Shipments	13.2%	8.9 - 14.7%
Gross Margin on Warehouse Sales	24.1%	22.3 - 27.2%
ASSET AND FINANCIAL MANAGEMENT		
Current Asset Turn (Sales/Current Assets)	3.05X	2.48 - 3.43X
Total Debt to Net Worth	85.3%	58.0 - 121.6%
Current Debt to Net Worth	49.9%	37.0 - 101.8%
Current Assets to Current Debt	2.94X	1.98 - 3.59X
Current Assets Minus Inventory/Curr Debt	1.07X	0.90 - 1.26X
INVOICE/TRANSACTION DATA		
Billing Lines Per Invoice	5.0	3.9 - 9.5
Average Invoice Size	$195	$99 - 241
Average Billing Line	$25.85	$16.62 - 52.48

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

HVAC & OTHER FIRMS -- SALES OVER $8,000,000

	TYPICAL	MIDDLE RANGE
PERSONNEL PRODUCTIVITY		
Sales Per Employee	$201,698	$165,811 - 234,244
Gross Margin Per Employee	$43,175	$39,257 - 50,748
Average Compensation Per Employee	$21,057	$18,992 - 24,660
Average Fringe Benefits Per Employee	$3,855	$2,825 - 5,096
Compensation & Fringes Per Employee	$24,896	$21,307 - 29,751
Payroll to Net Sales	10.7%	9.6 - 13.3%
Fringe Benefits to Net Sales	1.8%	1.6 - 2.5%
Payroll & Fringes to Net Sales	12.1%	11.0 - 15.5%
Payroll to Gross Margin	46.9%	44.1 - 54.3%
Fringe Benefits to Gross Margin	8.1%	7.1 - 11.5%
Payroll & Fringes to Gross Margin	56.4%	50.5 - 67.5%
INVENTORY MANAGEMENT		
Cost of Whse Goods Sold to Ave Inventory	3.29X	2.54 - 3.88X
No. of Days Average Inventory Carried	111 Days	94 - 143 Days
Total Cost of Goods Sold to Ave Inventory	3.91X	2.80 - 5.11X
Whse Gross Margin Return on Ave Inventory	105%	88 - 121%
Turn & Earn Profitability Index	81%	65 - 96%
Percent of Firms on LIFO	85.71%	
ACCOUNTS RECEIVABLE		
Average Collection Period	50 Days	44 - 54 Days
Gross Margin Return on Receivables	161%	149 - 203%
Aging of Receivable Dollars:		
Current (0-30 Days Outstanding)	70.6%	65.0 - 76.8%
31-60 Days Outstanding	16.5%	9.5 - 21.7%
61-90 Days Outstanding	6.3%	4.6 - 7.1%
Over 90 Days Outstanding	6.6%	3.9 - 9.3%
Total	100.0%	100.0 - 100.0%
Average Account Balance:		
Current (0-30 Days Outstanding)	$1,265	Insufficient Data
31-60 Days Outstanding	$1,365	Insufficient Data
61-90 Days Outstanding	$1,427	Insufficient Data
Over 90 Days Outstanding	$1,335	Insufficient Data
Total	$1,611	$910 - 2,322
Aging of Receivable Accounts:		
Current (0-30 Days Outstanding)	76.1%	Insufficient Data
31-60 Days Outstanding	13.1%	Insufficient Data
61-90 Days Outstanding	5.4%	Insufficient Data
Over 90 Days Outstanding	5.4%	Insufficient Data
Total	100.0%	Insufficient Data

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

HVAC & OTHER FIRMS -- SALES OVER $8,000,000

	TYPICAL	MIDDLE RANGE
INCOME STATEMENT		
Net Sales	100.0%	100.0 - 100.0%
Cost of Goods Sold	77.0%	74.1 - 80.1%
Gross Margin	23.2%	19.9 - 25.9%
Operating Expenses:		
Selling Expenses	6.1%	5.9 - 7.9%
Delivery Expenses	1.6%	1.4 - 2.0%
Warehouse Expenses	3.0%	2.1 - 3.6%
General & Administrative Expenses	6.2%	4.8 - 10.1%
Occupancy Expenses	1.4%	1.2 - 2.8%
Other Operating Expenses	0.0%	0.0 - 0.1%
Total Operating Expenses	22.1%	17.6 - 24.0%
Net Operating Profit	2.3%	0.9 - 3.9%
Non-Operating Income	1.9%	1.4 - 2.3%
Non-Operating Expenses	1.4%	1.2 - 2.0%
Net Profit Before Tax	3.3%	0.5 - 4.6%
Net Profit After Tax	1.9%	0.6 - 2.5%
OPERATING EXPENSE CONTROL		
Total Operating Expense to Net Sales	22.1%	17.6 - 24.0%
Total Operating Expense to Gross Margin	91.3%	85.3 - 95.5%
Non-People Expense to Net Sales	6.0%	4.8 - 7.2%
Non-People Expense to Gross Margin	25.6%	24.2 - 30.7%
INTEREST EXPENSE		
Interest Expense to Net Sales	0.8%	0.5 - 1.1%
Times Interest Earned	3.3X	2.3 - 10.7X
BALANCE SHEET		
Cash	2.1%	0.3 - 2.1%
Accounts & Notes Receivable, Trade(Net)	30.3%	25.0 - 35.0%
Inventory	49.3%	44.0 - 54.6%
Other Current Assets	1.7%	0.3 - 3.0%
Total Current Assets	83.4%	77.3 - 87.8%
All Other Assets	16.6%	12.2 - 22.7%
Total Assets	100.0%	100.0 - 100.0%
Total Current Liabilities	31.0%	21.7 - 42.2%
Total Long-Term Liabilities	15.4%	7.0 - 21.7%
Total Liabilities	46.4%	38.0 - 55.2%
Total Net Worth	53.6%	44.8 - 62.0%
Total Liabilities & Net Worth	100.0%	100.0 - 100.0%

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

HIGH PROFIT HVAC & OTHER EMPHASIS FIRMS

	TYPICAL	MIDDLE RANGE
OVERALL PERFORMANCE		
Net Profit After Tax to Net Worth	9.44%	6.74 - 15.53%
Total Assets to Net Worth	1.76X	1.34 - 2.38X
Net Profit After Tax to Total Assets	5.14%	4.07 - 6.40%
Net Sales to Total Assets	2.42X	2.07 - 2.92X
Net Profit After Tax to Net Sales	2.20%	1.60 - 3.10%
Net Profit Before Tax to Net Worth	15.26%	11.25 - 19.88%
Net Profit Before Tax to Total Assets	8.95%	5.60 - 10.19%
EBIT to Total Assets	9.66%	8.07 - 11.47%
SALES ANALYSIS		
Net Sales($000)	$4,661	$2,554 - 11,199
Percent Sales Change from Prior Year	7.91%	4.80 - 18.84%
Sales Mix:		
Direct Sales	9.1%	2.6 - 13.0%
Warehouse Sales - Counter and Delivery	90.9%	86.9 - 97.4%
TOTAL SALES	100.0%	100.0 - 100.0%
PRODUCT SALES MIX		
Plumbing Supplies & Equipment	33.0%	30.0 - 40.0%
Heating & Cooling Supplies & Equipment	27.9%	10.0 - 42.0%
Industrial P-V-F (Pipes-Valves-Fittings)	6.5%	0.0 - 10.0%
Other Industrial Supplies & Equipment	4.7%	0.0 - 9.5%
Other Products	27.9%	10.0 - 43.0%
TOTAL SALES	100.0%	100.0 - 100.0%
GROSS MARGIN		
Gross Margin on Net Sales	26.4%	22.9 - 30.7%
Gross Margin on Direct Shipments	13.4%	8.8 - 26.3%
Gross Margin on Warehouse Sales	26.0%	23.6 - 29.3%
ASSET AND FINANCIAL MANAGEMENT		
Current Asset Turn (Sales/Current Assets)	2.77X	2.40 - 3.25X
Total Debt to Net Worth	75.7%	34.0 - 137.9%
Current Debt to Net Worth	55.0%	31.2 - 105.3%
Current Assets to Current Debt	2.88X	1.97 - 3.79X
Current Assets Minus Inventory/Curr Debt	1.04X	0.80 - 1.64X
INVOICE/TRANSACTION DATA		
Billing Lines Per Invoice	6.1	4.2 - 10.0
Average Invoice Size	$149	$91 - 224
Average Billing Line	$25.28	$14.78 - 32.54

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

HIGH PROFIT HVAC & OTHER EMPHASIS FIRMS

	TYPICAL	MIDDLE RANGE
PERSONNEL PRODUCTIVITY		
Sales Per Employee	$184,231	$151,951 - 212,191
Gross Margin Per Employee	$43,175	$38,796 - 51,180
Average Compensation Per Employee	$21,274	$18,227 - 25,115
Average Fringe Benefits Per Employee	$3,810	$2,788 - 5,027
Compensation & Fringes Per Employee	$24,295	$20,827 - 28,817
Payroll to Net Sales	12.1%	10.1 - 15.1%
Fringe Benefits to Net Sales	2.0%	1.6 - 2.9%
Payroll & Fringes to Net Sales	12.4%	0.0 - 16.1%
Payroll to Gross Margin	48.8%	43.1 - 52.7%
Fringe Benefits to Gross Margin	8.2%	6.8 - 10.6%
Payroll & Fringes to Gross Margin	53.1%	0.0 - 59.2%
INVENTORY MANAGEMENT		
Cost of Whse Goods Sold to Ave Inventory	3.29X	2.59 - 3.88X
No. of Days Average Inventory Carried	111 Days	94 - 141 Days
Total Cost of Goods Sold to Ave Inventory	3.73X	2.82 - 4.83X
Whse Gross Margin Return on Ave Inventory	116%	105 - 137%
Turn & Earn Profitability Index	88%	75 - 102%
Percent of Firms on LIFO	48.72%	
ACCOUNTS RECEIVABLE		
Average Collection Period	47 Days	38 - 56 Days
Gross Margin Return on Receivables	206%	161 - 235%
Aging of Receivable Dollars:		
Current (0-30 Days Outstanding)	66.8%	59.9 - 74.0%
31-60 Days Outstanding	15.5%	10.2 - 19.6%
61-90 Days Outstanding	7.9%	4.4 - 9.0%
Over 90 Days Outstanding	9.8%	5.4 - 11.7%
Total	100.0%	100.0 - 100.0%
Average Account Balance:		
Current (0-30 Days Outstanding)	$944	$632 - 1,436
31-60 Days Outstanding	$967	$494 - 1,616
61-90 Days Outstanding	$981	$642 - 1,715
Over 90 Days Outstanding	$1,503	$750 - 2,392
Total	$921	$676 - 1,434
Aging of Receivable Accounts:		
Current (0-30 Days Outstanding)	69.9%	66.0 - 77.0%
31-60 Days Outstanding	17.2%	12.9 - 20.5%
61-90 Days Outstanding	7.2%	4.4 - 9.6%
Over 90 Days Outstanding	5.7%	3.5 - 7.7%
Total	100.0%	100.0 - 100.0%

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

HIGH PROFIT HVAC & OTHER EMPHASIS FIRMS

	TYPICAL	MIDDLE RANGE
INCOME STATEMENT		
Net Sales	100.0%	100.0 - 100.0%
Cost of Goods Sold	74.4%	69.3 - 77.1%
Gross Margin	26.4%	22.9 - 30.7%
Operating Expenses:		
Selling Expenses	6.1%	4.9 - 7.2%
Delivery Expenses	1.8%	1.4 - 2.2%
Warehouse Expenses	2.3%	1.3 - 3.7%
General & Administrative Expenses	9.8%	5.9 - 13.4%
Occupancy Expenses	1.9%	1.2 - 2.9%
Other Operating Expenses	0.0%	0.0 - 0.1%
Total Operating Expenses	22.8%	18.9 - 27.4%
Net Operating Profit	3.5%	2.4 - 4.6%
Non-Operating Income	2.0%	0.9 - 2.8%
Non-Operating Expenses	1.5%	1.0 - 2.4%
Net Profit Before Tax	3.7%	2.2 - 4.8%
Net Profit After Tax	2.2%	1.6 - 3.1%
OPERATING EXPENSE CONTROL		
Total Operating Expense to Net Sales	22.8%	18.9 - 27.4%
Total Operating Expense to Gross Margin	85.7%	82.9 - 90.9%
Non-People Expense to Net Sales	6.6%	5.6 - 7.9%
Non-People Expense to Gross Margin	29.1%	24.3 - 34.1%
INTEREST EXPENSE		
Interest Expense to Net Sales	0.8%	0.3 - 1.3%
Times Interest Earned	6.2X	2.9 - 13.3X
BALANCE SHEET		
Cash	6.9%	1.0 - 9.6%
Accounts & Notes Receivable, Trade(Net)	27.3%	24.1 - 33.5%
Inventory	48.8%	44.5 - 54.8%
Other Current Assets	2.7%	0.3 - 4.2%
Total Current Assets	85.8%	82.8 - 94.0%
All Other Assets	14.2%	6.0 - 17.2%
Total Assets	100.0%	100.0 - 100.0%
Total Current Liabilities	31.7%	21.9 - 44.1%
Total Long-Term Liabilities	13.4%	2.3 - 22.8%
Total Liabilities	45.1%	30.1 - 54.8%
Total Net Worth	54.9%	45.2 - 69.9%
Total Liabilities & Net Worth	100.0%	100.0 - 100.0%

All Reporting Firms

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

ALL FIRMS

	TYPICAL	MIDDLE RANGE
OVERALL PERFORMANCE		
Net Profit After Tax to Net Worth	8.76%	3.82 - 13.97%
Total Assets to Net Worth	1.88X	1.46 - 2.96X
Net Profit After Tax to Total Assets	4.04%	1.90 - 6.71%
Net Sales to Total Assets	2.47X	2.10 - 3.02X
Net Profit After Tax to Net Sales	1.50%	0.80 - 2.60%
Net Profit Before Tax to Net Worth	12.49%	4.85 - 20.45%
Net Profit Before Tax to Total Assets	5.72%	2.33 - 10.09%
EBIT to Total Assets	8.03%	4.73 - 11.94%
SALES ANALYSIS		
Net Sales($000)	$5,357	$2,860 - 11,026
Percent Sales Change from Prior Year	8.29%	-0.52 - 18.70%
Sales Mix:		
Direct Sales	10.2%	3.6 - 14.9%
Warehouse Sales - Counter and Delivery	89.8%	85.0 - 96.4%
TOTAL SALES	100.0%	100.0 - 100.0%
PRODUCT SALES MIX		
Plumbing Supplies & Equipment	53.3%	32.5 - 76.5%
Heating & Cooling Supplies & Equipment	15.4%	0.0 - 25.0%
Industrial P-V-F (Pipes-Valves-Fittings)	18.7%	0.0 - 24.5%
Other Industrial Supplies & Equipment	3.0%	3.0 - 2.3%
Other Products	9.6%	0.0 - 10.9%
TOTAL SALES	100.0%	100.0 - 100.0%
GROSS MARGIN		
Gross Margin on Net Sales	24.9%	21.7 - 27.7%
Gross Margin on Direct Shipments	11.7%	9.0 - 15.0%
Gross Margin on Warehouse Sales	25.1%	23.2 - 28.3%
ASSET AND FINANCIAL MANAGEMENT		
Current Asset Turn (Sales/Current Assets)	2.90X	2.46 - 3.46X
Total Debt to Net Worth	88.0%	45.8 - 189.8%
Current Debt to Net Worth	63.7%	36.1 - 143.9%
Current Assets to Current Debt	2.51X	1.73 - 3.66X
Current Assets Minus Inventory/Curr Debt	1.05X	0.74 - 1.63X
INVOICE/TRANSACTION DATA		
Billing Lines Per Invoice	5.0	4.2 - 8.0
Average Invoice Size	$165	$105 - 247
Average Billing Line	$28.69	$18.12 - 47.08

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

ALL FIRMS

	TYPICAL	MIDDLE RANGE
PERSONNEL PRODUCTIVITY		
Sales Per Employee	$187,024	$154,316 - 235,628
Gross Margin Per Employee	$46,365	$37,497 - 55,500
Average Compensation Per Employee	$22,594	$19,368 - 26,012
Average Fringe Benefits Per Employee	$4,149	$3,049 - 5,201
Compensation & Fringes Per Employee	$26,566	$22,220 - 31,183
Payroll to Net Sales	11.8%	10.2 - 13.8%
Fringe Benefits to Net Sales	2.1%	1.7 - 2.8%
Payroll & Fringes to Net Sales	13.5%	11.2 - 16.3%
Payroll to Gross Margin	48.9%	44.5 - 53.4%
Fringe Benefits to Gross Margin	8.6%	7.0 - 11.3%
Payroll & Fringes to Gross Margin	57.2%	50.3 - 62.4%
INVENTORY MANAGEMENT		
Cost of Whse Goods Sold to Ave Inventory	3.43X	2.68 - 4.48X
No. of Days Average Inventory Carried	106 Days	81 - 136 Days
Total Cost of Goods Sold to Ave Inventory	3.98X	3.05 - 5.27X
Whse Gross Margin Return on Ave Inventory	120%	98 - 149%
Turn & Earn Profitability Index	87%	72 - 109%
Percent of Firms on LIFO	49.82%	
ACCOUNTS RECEIVABLE		
Average Collection Period	47 Days	40 - 56 Days
Gross Margin Return on Receivables	185%	152 - 224%
Aging of Receivable Dollars:		
Current (0-30 Days Outstanding)	65.2%	56.4 - 73.9%
31-60 Days Outstanding	17.5%	12.7 - 21.5%
61-90 Days Outstanding	7.7%	4.5 - 9.7%
Over 90 Days Outstanding	9.6%	3.9 - 13.1%
Total	100.0%	100.0 - 100.0%
Average Account Balance:		
Current (0-30 Days Outstanding)	$1,162	$754 - 2,059
31-60 Days Outstanding	$1,215	$814 - 2,420
61-90 Days Outstanding	$1,241	$742 - 2,241
Over 90 Days Outstanding	$1,540	$852 - 2,684
Total	$1,232	$828 - 1,921
Aging of Receivable Accounts:		
Current (0-30 Days Outstanding)	68.5%	62.0 - 77.9%
31-60 Days Outstanding	16.6%	11.1 - 21.2%
61-90 Days Outstanding	7.4%	4.4 - 9.7%
Over 90 Days Outstanding	7.4%	3.9 - 9.5%
Total	100.0%	100.0 - 100.0%

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

ALL FIRMS

	TYPICAL	MIDDLE RANGE
INCOME STATEMENT		
Net Sales	100.0%	100.0 - 100.0%
Cost of Goods Sold	75.9%	72.3 - 78.3%
Gross Margin	24.9%	21.7 - 27.7%
Operating Expenses:		
Selling Expenses	6.3%	4.7 - 7.5%
Delivery Expenses	1.8%	1.4 - 2.4%
Warehouse Expenses	2.6%	1.9 - 3.6%
General & Administrative Expenses	8.6%	6.6 - 10.7%
Occupancy Expenses	1.6%	1.1 - 2.5%
Other Operating Expenses	0.0%	0.0 - 0.3%
Total Operating Expenses	21.9%	19.1 - 24.9%
Net Operating Profit	2.3%	0.9 - 3.9%
Non-Operating Income	1.8%	1.0 - 2.5%
Non-Operating Expenses	1.7%	1.0 - 2.5%
Net Profit Before Tax	2.0%	0.7 - 4.1%
Net Profit After Tax	1.5%	0.8 - 2.6%
OPERATING EXPENSE CONTROL		
Total Operating Expense to Net Sales	21.9%	19.1 - 24.9%
Total Operating Expense to Gross Margin	90.8%	84.2 - 96.4%
Non-People Expense to Net Sales	7.4%	6.3 - 8.7%
Non-People Expense to Gross Margin	31.0%	26.2 - 35.8%
INTEREST EXPENSE		
Interest Expense to Net Sales	0.8%	0.4 - 1.7%
Times Interest Earned	3.0X	1.7 - 7.8X
BALANCE SHEET		
Cash	5.8%	0.6 - 8.1%
Accounts & Notes Receivable, Trade(Net)	30.8%	24.7 - 36.5%
Inventory	47.5%	39.9 - 56.2%
Other Current Assets	2.7%	0.4 - 2.7%
Total Current Assets	86.7%	82.4 - 93.5%
All Other Assets	13.3%	6.5 - 17.6%
Total Assets	100.0%	100.0 - 100.0%
Total Current Liabilities	36.4%	22.3 - 48.3%
Total Long-Term Liabilities	11.0%	1.3 - 16.0%
Total Liabilities	47.5%	31.2 - 62.1%
Total Net Worth	52.5%	37.9 - 68.8%
Total Liabilities & Net Worth	100.0%	100.0 - 100.0%

All Firms by Geographic Region

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

REGION: NEW ENGLAND (CT, ME, MA, NH, RI, VT)

	TYPICAL	MIDDLE RANGE
OVERALL PERFORMANCE		
Net Profit After Tax to Net Worth	12.26%	7.43 - 16.62%
Total Assets to Net Worth	1.88X	1.44 - 2.96X
Net Profit After Tax to Total Assets	5.91%	4.45 - 7.36%
Net Sales to Total Assets	2.58X	2.09 - 3.02X
Net Profit After Tax to Net Sales	2.30%	1.50 - 3.20%
Net Profit Before Tax to Net Worth	16.70%	12.41 - 23.40%
Net Profit Before Tax to Total Assets	9.41%	6.40 - 12.73%
EBIT to Total Assets	11.41%	9.13 - 14.87%
SALES ANALYSIS		
Net Sales($000)	$5,819	$3,670 - 11,624
Percent Sales Change from Prior Year	21.05%	12.00 - 26.91%
Sales Mix:		
Direct Sales	5.8%	1.3 - 9.3%
Warehouse Sales - Counter and Delivery	94.2%	90.7 - 98.7%
TOTAL SALES	100.0%	100.0 - 100.0%
PRODUCT SALES MIX		
Plumbing Supplies & Equipment	47.6%	37.0 - 60.0%
Heating & Cooling Supplies & Equipment	31.1%	20.0 - 39.0%
Industrial P-V-F (Pipes-Valves-Fittings)	15.1%	0.0 - 20.0%
Other Industrial Supplies & Equipment	0.7%	0.0 - 0.7%
Other Products	5.6%	0.0 - 10.0%
TOTAL SALES	100.0%	100.0 - 100.0%
GROSS MARGIN		
Gross Margin on Net Sales	25.3%	23.2 - 27.4%
Gross Margin on Direct Shipments	10.8%	8.3 - 25.5%
Gross Margin on Warehouse Sales	26.4%	24.9 - 29.9%
ASSET AND FINANCIAL MANAGEMENT		
Current Asset Turn (Sales/Current Assets)	2.96X	2.39 - 3.36X
Total Debt to Net Worth	88.0%	44.3 - 196.4%
Current Debt to Net Worth	88.0%	39.9 - 147.8%
Current Assets to Current Debt	2.10X	1.70 - 3.50X
Current Assets Minus Inventory/Curr Debt	1.01X	0.73 - 1.76X
INVOICE/TRANSACTION DATA		
Billing Lines Per Invoice	7.0	5.0 - 9.0
Average Invoice Size	$143	$92 - 185
Average Billing Line	$19.52	$13.05 - 26.33

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

REGION: NEW ENGLAND (CT, ME, MA, NH, RI, VT)

	TYPICAL	MIDDLE RANGE
PERSONNEL PRODUCTIVITY		
Sales Per Employee	$212,821	$163,706 - 267,526
Gross Margin Per Employee	$52,741	$41,598 - 68,646
Average Compensation Per Employee	$24,875	$20,422 - 30,636
Average Fringe Benefits Per Employee	$4,273	$3,266 - 6,632
Compensation & Fringes Per Employee	$28,794	$24,108 - 35,423
Payroll to Net Sales	11.4%	9.7 - 12.5%
Fringe Benefits to Net Sales	2.3%	1.6 - 2.8%
Payroll & Fringes to Net Sales	13.7%	11.3 - 16.0%
Payroll to Gross Margin	45.2%	39.4 - 51.4%
Fringe Benefits to Gross Margin	8.4%	6.6 - 11.3%
Payroll & Fringes to Gross Margin	54.3%	47.4 - 61.6%
INVENTORY MANAGEMENT		
Cost of Whse Goods Sold to Ave Inventory	3.37X	2.51 - 5.06X
No. of Days Average Inventory Carried	108 Days	72 - 145 Days
Total Cost of Goods Sold to Ave Inventory	4.08X	3.20 - 5.77X
Whse Gross Margin Return on Ave Inventory	131%	109 - 161%
Turn & Earn Profitability Index	92%	74 - 124%
Percent of Firms on LIFO	31.03%	
ACCOUNTS RECEIVABLE		
Average Collection Period	52 Days	46 - 62 Days
Gross Margin Return on Receivables	185%	168 - 214%
Aging of Receivable Dollars:		
Current (0-30 Days Outstanding)	66.2%	59.1 - 74.7%
31-60 Days Outstanding	18.2%	14.5 - 21.7%
61-90 Days Outstanding	8.4%	4.3 - 11.4%
Over 90 Days Outstanding	7.2%	3.5 - 10.7%
Total	100.0%	100.0 - 100.0%
Average Account Balance:		
Current (0-30 Days Outstanding)	$1,447	$1,217 - 1,772
31-60 Days Outstanding	$1,608	$1,081 - 2,953
61-90 Days Outstanding	$1,477	$1,033 - 2,018
Over 90 Days Outstanding	$1,925	$921 - 2,514
Total	$1,461	$1,325 - 1,900
Aging of Receivable Accounts:		
Current (0-30 Days Outstanding)	66.8%	63.0 - 73.5%
31-60 Days Outstanding	17.1%	11.1 - 20.8%
61-90 Days Outstanding	9.3%	6.0 - 12.2%
Over 90 Days Outstanding	6.7%	3.6 - 10.7%
Total	100.0%	100.0 - 100.0%

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

REGION: NEW ENGLAND (CT, ME, MA, NH, RI, VT)

	TYPICAL	MIDDLE RANGE
INCOME STATEMENT		
Net Sales	100.0%	100.0 - 100.0%
Cost of Goods Sold	75.4%	72.5 - 76.8%
Gross Margin	25.3%	23.2 - 27.4%
Operating Expenses:		
Selling Expenses	4.5%	3.7 - 5.7%
Delivery Expenses	2.1%	1.6 - 2.9%
Warehouse Expenses	2.5%	1.9 - 4.1%
General & Administrative Expenses	8.7%	7.9 - 11.6%
Occupancy Expenses	1.6%	0.6 - 2.4%
Other Operating Expenses	0.0%	0.0 - 0.2%
Total Operating Expenses	20.5%	19.0 - 24.6%
Net Operating Profit	3.6%	2.0 - 4.8%
Non-Operating Income	1.6%	0.6 - 2.1%
Non-Operating Expenses	1.2%	0.6 - 2.7%
Net Profit Before Tax	3.3%	1.6 - 4.9%
Net Profit After Tax	2.3%	1.5 - 3.2%
OPERATING EXPENSE CONTROL		
Total Operating Expense to Net Sales	20.5%	19.0 - 24.6%
Total Operating Expense to Gross Margin	85.2%	80.1 - 92.2%
Non-People Expense to Net Sales	6.6%	5.3 - 9.3%
Non-People Expense to Gross Margin	28.8%	21.7 - 33.5%
INTEREST EXPENSE		
Interest Expense to Net Sales	0.6%	0.3 - 2.0%
Times Interest Earned	6.5X	2.2 - 11.9X
BALANCE SHEET		
Cash	7.4%	1.1 - 16.1%
Accounts & Notes Receivable, Trade(Net)	31.5%	24.5 - 39.8%
Inventory	46.6%	41.1 - 53.3%
Other Current Assets	2.9%	0.5 - 3.8%
Total Current Assets	88.4%	85.4 - 92.3%
All Other Assets	11.6%	7.7 - 14.6%
Total Assets	100.0%	100.0 - 100.0%
Total Current Liabilities	39.1%	27.1 - 49.8%
Total Long-Term Liabilities	8.6%	0.0 - 14.2%
Total Liabilities	47.7%	29.6 - 67.3%
Total Net Worth	52.3%	32.7 - 70.4%
Total Liabilities & Net Worth	100.0%	100.0 - 100.0%

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

REGION: NEW YORK STATE (EXCLUDING NYC)

	TYPICAL	MIDDLE RANGE
OVERALL PERFORMANCE		
Net Profit After Tax to Net Worth	13.30%	5.46 - 18.86%
Total Assets to Net Worth	1.60X	1.29 - 2.72X
Net Profit After Tax to Total Assets	5.19%	3.58 - 8.35%
Net Sales to Total Assets	2.78X	2.01 - 3.12X
Net Profit After Tax to Net Sales	2.20%	1.40 - 3.60%
Net Profit Before Tax to Net Worth	17.64%	7.96 - 28.72%
Net Profit Before Tax to Total Assets	9.62%	4.08 - 14.50%
EBIT to Total Assets	13.56%	5.53 - 17.10%
SALES ANALYSIS		
Net Sales($000)	$5,231	$2,503 - 7,568
Percent Sales Change from Prior Year	15.69%	7.21 - 23.74%
Sales Mix:		
Direct Sales	7.4%	2.0 - 12.2%
Warehouse Sales - Counter and Delivery	92.6%	87.8 - 98.0%
TOTAL SALES	100.0%	100.0 - 100.0%
PRODUCT SALES MIX		
Plumbing Supplies & Equipment	61.8%	42.5 - 82.0%
Heating & Cooling Supplies & Equipment	15.8%	5.0 - 22.5%
Industrial P-V-F (Pipes-Valves-Fittings)	14.3%	2.5 - 25.0%
Other Industrial Supplies & Equipment	1.9%	0.0 - 1.9%
Other Products	6.2%	0.0 - 13.0%
TOTAL SALES	100.0%	100.0 - 100.0%
GROSS MARGIN		
Gross Margin on Net Sales	23.6%	22.1 - 27.1%
Gross Margin on Direct Shipments	18.0%	8.5 - 27.6%
Gross Margin on Warehouse Sales	25.1%	22.9 - 27.6%
ASSET AND FINANCIAL MANAGEMENT		
Current Asset Turn (Sales/Current Assets)	3.03X	2.59 - 3.59X
Total Debt to Net Worth	60.4%	29.0 - 171.7%
Current Debt to Net Worth	47.7%	29.0 - 140.8%
Current Assets to Current Debt	2.84X	1.75 - 3.49X
Current Assets Minus Inventory/Curr Debt	1.17X	0.66 - 2.19X
INVOICE/TRANSACTION DATA		
Billing Lines Per Invoice	6.0	3.9 - 9.0
Average Invoice Size	$163	$112 - 179
Average Billing Line	$25.85	$21.63 - 45.45

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

REGION: NEW YORK STATE (EXCLUDING NYC)

	TYPICAL	MIDDLE RANGE
PERSONNEL PRODUCTIVITY		
Sales Per Employee	$165,665	$126,152 - 210,646
Gross Margin Per Employee	$38,815	$32,398 - 52,421
Average Compensation Per Employee	$19,624	$15,663 - 22,035
Average Fringe Benefits Per Employee	$3,480	$2,484 - 4,713
Compensation & Fringes Per Employee	$23,614	$19,676 - 26,336
Payroll to Net Sales	11.9%	9.7 - 13.3%
Fringe Benefits to Net Sales	1.8%	1.5 - 2.5%
Payroll & Fringes to Net Sales	13.4%	11.2 - 15.8%
Payroll to Gross Margin	49.5%	44.1 - 53.8%
Fringe Benefits to Gross Margin	8.1%	6.7 - 10.8%
Payroll & Fringes to Gross Margin	55.5%	48.9 - 64.3%
INVENTORY MANAGEMENT		
Cost of Whse Goods Sold to Ave Inventory	3.36X	2.86 - 6.83X
No. of Days Average Inventory Carried	109 Days	53 - 127 Days
Total Cost of Goods Sold to Ave Inventory	4.16X	3.34 - 6.87X
Whse Gross Margin Return on Ave Inventory	109%	103 - 199%
Turn & Earn Profitability Index	81%	75 - 154%
Percent of Firms on LIFO	22.22%	
ACCOUNTS RECEIVABLE		
Average Collection Period	51 Days	43 - 57 Days
Gross Margin Return on Receivables	178%	121 - 195%
Aging of Receivable Dollars:		
Current (0-30 Days Outstanding)	63.5%	54.4 - 71.7%
31-60 Days Outstanding	15.6%	12.1 - 19.9%
61-90 Days Outstanding	9.3%	4.4 - 13.9%
Over 90 Days Outstanding	11.5%	4.4 - 20.6%
Total	100.0%	100.0 - 100.0%
Average Account Balance:		
Current (0-30 Days Outstanding)	$788	$519 - 1,382
31-60 Days Outstanding	$1,946	$659 - 2,374
61-90 Days Outstanding	$1,377	$1,024 - 2,942
Over 90 Days Outstanding	$1,368	$968 - 2,771
Total	$874	$644 - 1,484
Aging of Receivable Accounts:		
Current (0-30 Days Outstanding)	75.1%	66.2 - 85.3%
31-60 Days Outstanding	11.9%	7.7 - 16.2%
61-90 Days Outstanding	6.6%	4.1 - 8.4%
Over 90 Days Outstanding	6.4%	2.0 - 10.1%
Total	100.0%	100.0 - 100.0%

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

REGION: NEW YORK STATE (EXCLUDING NYC)

	TYPICAL	MIDDLE RANGE
INCOME STATEMENT		
Net Sales	100.0%	100.0 - 100.0%
Cost of Goods Sold	76.3%	72.9 - 77.9%
Gross Margin	23.6%	22.1 - 27.1%
Operating Expenses:		
Selling Expenses	5.0%	3.8 - 6.5%
Delivery Expenses	1.9%	0.9 - 2.2%
Warehouse Expenses	1.6%	0.3 - 2.6%
General & Administrative Expenses	7.8%	6.3 - 10.4%
Occupancy Expenses	1.8%	1.6 - 2.8%
Other Operating Expenses	0.0%	0.0 - 0.9%
Total Operating Expenses	19.2%	17.3 - 22.0%
Net Operating Profit	4.7%	3.4 - 5.3%
Non-Operating Income	1.9%	1.2 - 2.6%
Non-Operating Expenses	1.0%	0.9 - 1.8%
Net Profit Before Tax	5.5%	3.0 - 6.6%
Net Profit After Tax	2.2%	1.4 - 3.6%
OPERATING EXPENSE CONTROL		
Total Operating Expense to Net Sales	19.2%	17.3 - 22.0%
Total Operating Expense to Gross Margin	82.4%	78.1 - 85.2%
Non-People Expense to Net Sales	6.3%	5.0 - 7.5%
Non-People Expense to Gross Margin	27.0%	22.1 - 33.4%
INTEREST EXPENSE		
Interest Expense to Net Sales	0.4%	0.1 - 0.9%
Times Interest Earned	9.6X	3.1 - 44.4X
BALANCE SHEET		
Cash	7.4%	1.3 - 11.0%
Accounts & Notes Receivable, Trade(Net)	30.6%	19.1 - 35.7%
Inventory	42.3%	30.8 - 55.7%
Other Current Assets	10.6%	0.4 - 15.0%
Total Current Assets	90.9%	85.6 - 97.4%
All Other Assets	9.1%	2.6 - 14.4%
Total Assets	100.0%	100.0 - 100.0%
Total Current Liabilities	31.9%	13.6 - 46.4%
Total Long-Term Liabilities	3.3%	0.0 - 5.6%
Total Liabilities	35.2%	13.6 - 52.2%
Total Net Worth	64.8%	47.8 - 86.4%
Total Liabilities & Net Worth	100.0%	100.0 - 100.0%

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

REGION: MIDDLE ATLANTIC (DE, EASTERN PA, MD, NJ, WA. DC)

	TYPICAL	MIDDLE RANGE
OVERALL PERFORMANCE		
Net Profit After Tax to Net Worth	10.12%	5.97 - 16.98%
Total Assets to Net Worth	2.01X	1.68 - 2.75X
Net Profit After Tax to Total Assets	5.02%	2.91 - 6.90%
Net Sales to Total Assets	2.81X	2.18 - 3.41X
Net Profit After Tax to Net Sales	2.00%	1.10 - 2.90%
Net Profit Before Tax to Net Worth	17.42%	6.44 - 26.19%
Net Profit Before Tax to Total Assets	7.03%	3.65 - 10.85%
EBIT to Total Assets	9.88%	6.45 - 11.45%
SALES ANALYSIS		
Net Sales($000)	$5,308	$3,003 - 9,840
Percent Sales Change from Prior Year	9.80%	2.42 - 18.45%
Sales Mix:		
Direct Sales	8.6%	1.2 - 12.4%
Warehouse Sales - Counter and Delivery	91.3%	87.6 - 98.8%
TOTAL SALES	100.0%	100.0 - 100.0%
PRODUCT SALES MIX		
Plumbing Supplies & Equipment	50.5%	31.5 - 69.0%
Heating & Cooling Supplies & Equipment	22.6%	11.3 - 34.8%
Industrial P-V-F (Pipes-Valves-Fittings)	15.0%	0.0 - 15.0%
Other Industrial Supplies & Equipment	3.3%	0.0 - 3.3%
Other Products	8.6%	0.0 - 10.0%
TOTAL SALES	100.0%	100.0 - 100.0%
GROSS MARGIN		
Gross Margin on Net Sales	24.3%	21.0 - 25.5%
Gross Margin on Direct Shipments	12.8%	10.4 - 18.3%
Gross Margin on Warehouse Sales	24.2%	23.0 - 26.7%
ASSET AND FINANCIAL MANAGEMENT		
Current Asset Turn (Sales/Current Assets)	3.26X	2.40 - 3.80X
Total Debt to Net Worth	101.4%	68.4 - 174.5%
Current Debt to Net Worth	69.9%	40.1 - 162.3%
Current Assets to Current Debt	1.97X	1.62 - 3.38X
Current Assets Minus Inventory/Curr Debt	0.96X	0.71 - 1.46X
INVOICE/TRANSACTION DATA		
Billing Lines Per Invoice	5.5	4.6 - 9.8
Average Invoice Size	$147	$107 - 229
Average Billing Line	$26.62	$17.88 - 34.66

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

REGION: MIDDLE ATLANTIC (DE, EASTERN PA, MD, NJ, WA. DC)

	TYPICAL	MIDDLE RANGE
PERSONNEL PRODUCTIVITY		
Sales Per Employee	$199,317	$164,683 - 250,283
Gross Margin Per Employee	$48,776	$41,826 - 56,203
Average Compensation Per Employee	$22,802	$19,738 - 25,658
Average Fringe Benefits Per Employee	$4,246	$3,128 - 5,723
Compensation & Fringes Per Employee	$26,957	$22,407 - 30,271
Payroll to Net Sales	11.9%	9.9 - 13.4%
Fringe Benefits to Net Sales	2.1%	1.7 - 3.2%
Payroll & Fringes to Net Sales	12.5%	10.3 - 16.5%
Payroll to Gross Margin	47.7%	44.5 - 52.0%
Fringe Benefits to Gross Margin	8.9%	7.4 - 11.1%
Payroll & Fringes to Gross Margin	56.1%	47.4 - 59.8%
INVENTORY MANAGEMENT		
Cost of Whse Goods Sold to Ave Inventory	4.71X	3.51 - 5.74X
No. of Days Average Inventory Carried	78 Days	64 - 104 Days
Total Cost of Goods Sold to Ave Inventory	4.52X	3.51 - 6.64X
Whse Gross Margin Return on Ave Inventory	136%	109 - 239%
Turn & Earn Profitability Index	105%	87 - 167%
Percent of Firms on LIFO	30.00%	
ACCOUNTS RECEIVABLE		
Average Collection Period	53 Days	42 - 64 Days
Gross Margin Return on Receivables	169%	125 - 220%
Aging of Receivable Dollars:		
Current (0-30 Days Outstanding)	66.2%	53.9 - 78.4%
31-60 Days Outstanding	16.5%	12.3 - 19.7%
61-90 Days Outstanding	7.6%	3.1 - 9.3%
Over 90 Days Outstanding	9.7%	2.9 - 13.6%
Total	100.0%	100.0 - 100.0%
Average Account Balance:		
Current (0-30 Days Outstanding)	$1,336	$941 - 2,507
31-60 Days Outstanding	$1,423	$704 - 2,427
61-90 Days Outstanding	$1,835	$914 - 2,559
Over 90 Days Outstanding	$1,703	$864 - 3,787
Total	$1,324	$914 - 2,853
Aging of Receivable Accounts:		
Current (0-30 Days Outstanding)	62.9%	52.5 - 70.2%
31-60 Days Outstanding	19.8%	14.4 - 25.6%
61-90 Days Outstanding	9.4%	5.4 - 11.6%
Over 90 Days Outstanding	8.0%	3.6 - 9.6%
Total	100.0%	100.0 - 100.0%

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

REGION: MIDDLE ATLANTIC (DE, EASTERN PA, MD, NJ, WA. DC)

	TYPICAL	MIDDLE RANGE
INCOME STATEMENT		
Net Sales	100.0%	100.0 - 100.0%
Cost of Goods Sold	76.7%	74.5 - 79.0%
Gross Margin	24.3%	21.0 - 25.5%
Operating Expenses:		
Selling Expenses	5.8%	4.1 - 7.5%
Delivery Expenses	2.0%	1.5 - 2.7%
Warehouse Expenses	2.7%	1.4 - 3.5%
General & Administrative Expenses	7.5%	5.6 - 10.2%
Occupancy Expenses	1.6%	1.1 - 3.1%
Other Operating Expenses	0.0%	0.0 - 0.3%
Total Operating Expenses	20.3%	18.0 - 24.1%
Net Operating Profit	3.0%	1.1 - 4.5%
Non-Operating Income	1.6%	0.7 - 2.8%
Non-Operating Expenses	1.6%	1.0 - 2.5%
Net Profit Before Tax	2.3%	1.1 - 4.4%
Net Profit After Tax	2.0%	1.1 - 2.9%
OPERATING EXPENSE CONTROL		
Total Operating Expense to Net Sales	20.3%	18.0 - 24.1%
Total Operating Expense to Gross Margin	87.3%	83.5 - 94.9%
Non-People Expense to Net Sales	7.1%	6.0 - 8.6%
Non-People Expense to Gross Margin	30.6%	23.8 - 35.9%
INTEREST EXPENSE		
Interest Expense to Net Sales	0.8%	0.3 - 1.3%
Times Interest Earned	4.1X	2.1 - 10.7X
BALANCE SHEET		
Cash	5.9%	1.1 - 6.4%
Accounts & Notes Receivable, Trade(Net)	35.1%	26.3 - 41.2%
Inventory	42.4%	29.3 - 54.9%
Other Current Assets	2.3%	0.6 - 4.2%
Total Current Assets	85.6%	75.9 - 94.9%
All Other Assets	14.4%	5.1 - 24.1%
Total Assets	100.0%	100.0 - 100.0%
Total Current Liabilities	37.5%	21.6 - 56.1%
Total Long-Term Liabilities	10.9%	2.4 - 20.3%
Total Liabilities	48.4%	33.2 - 68.0%
Total Net Worth	51.6%	32.0 - 66.8%
Total Liabilities & Net Worth	100.0%	100.0 - 100.0%

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

REGION: EAST CENTRAL (IN, OH, WESTERN PA, WV)

	TYPICAL	MIDDLE RANGE
OVERALL PERFORMANCE		
Net Profit After Tax to Net Worth	5.88%	2.53 - 14.07%
Total Assets to Net Worth	1.92X	1.37 - 2.76X
Net Profit After Tax to Total Assets	3.57%	1.07 - 5.73%
Net Sales to Total Assets	2.55X	2.10 - 2.93X
Net Profit After Tax to Net Sales	1.30%	0.50 - 1.90%
Net Profit Before Tax to Net Worth	9.19%	3.37 - 20.49%
Net Profit Before Tax to Total Assets	4.52%	1.61 - 9.52%
EBIT to Total Assets	7.11%	4.07 - 9.74%
SALES ANALYSIS		
Net Sales ($000)	$5,029	$2,562 - 10,672
Percent Sales Change from Prior Year	8.07%	1.10 - 15.61%
Sales Mix:		
Direct Sales	11.1%	3.6 - 13.6%
Warehouse Sales - Counter and Delivery	88.9%	86.4 - 96.4%
TOTAL SALES	100.0%	100.0 - 100.0%
PRODUCT SALES MIX		
Plumbing Supplies & Equipment	43.1%	30.0 - 65.0%
Heating & Cooling Supplies & Equipment	12.5%	0.0 - 21.8%
Industrial P-V-F (Pipes-Valves-Fittings)	23.8%	3.1 - 37.5%
Other Industrial Supplies & Equipment	5.4%	0.0 - 8.9%
Other Products	15.2%	0.0 - 28.8%
TOTAL SALES	100.0%	100.0 - 100.0%
GROSS MARGIN		
Gross Margin on Net Sales	25.2%	21.4 - 28.7%
Gross Margin on Direct Shipments	11.6%	8.3 - 13.5%
Gross Margin on Warehouse Sales	25.3%	23.3 - 29.6%
ASSET AND FINANCIAL MANAGEMENT		
Current Asset Turn (Sales/Current Assets)	2.84X	2.43 - 3.49X
Total Debt to Net Worth	86.9%	36.2 - 166.4%
Current Debt to Net Worth	60.8%	30.7 - 109.8%
Current Assets to Current Debt	2.65X	1.76 - 4.26X
Current Assets Minus Inventory/Curr Debt	1.07X	0.75 - 1.61X
INVOICE/TRANSACTION DATA		
Billing Lines Per Invoice	5.0	4.0 - 6.8
Average Invoice Size	$132	$89 - 247
Average Billing Line	$28.03	$15.94 - 50.53

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

REGION: EAST CENTRAL (IN, OH, WESTERN PA, WV)

	TYPICAL	MIDDLE RANGE
PERSONNEL PRODUCTIVITY		
Sales Per Employee	$165,112	$146,904 - 209,576
Gross Margin Per Employee	$43,559	$37,118 - 48,498
Average Compensation Per Employee	$22,056	$18,358 - 24,860
Average Fringe Benefits Per Employee	$4,010	$3,318 - 4,953
Compensation & Fringes Per Employee	$25,458	$22,115 - 29,289
Payroll to Net Sales	12.1%	10.4 - 14.9%
Fringe Benefits to Net Sales	2.3%	1.8 - 3.0%
Payroll & Fringes to Net Sales	14.5%	11.8 - 17.1%
Payroll to Gross Margin	49.3%	44.5 - 54.2%
Fringe Benefits to Gross Margin	9.1%	7.5 - 12.0%
Payroll & Fringes to Gross Margin	57.9%	51.7 - 63.3%
INVENTORY MANAGEMENT		
Cost of Whse Goods Sold to Ave Inventory	3.22X	2.57 - 3.79X
No. of Days Average Inventory Carried	113 Days	96 - 142 Days
Total Cost of Goods Sold to Ave Inventory	3.44X	2.85 - 4.71X
Whse Gross Margin Return on Ave Inventory	112%	92 - 138%
Turn & Earn Profitability Index	82%	72 - 99%
Percent of Firms on LIFO	68.29%	
ACCOUNTS RECEIVABLE		
Average Collection Period	45 Days	38 - 50 Days
Gross Margin Return on Receivables	212%	177 - 244%
Aging of Receivable Dollars:		
Current (0-30 Days Outstanding)	64.7%	57.2 - 74.0%
31-60 Days Outstanding	17.6%	12.7 - 22.2%
61-90 Days Outstanding	6.9%	4.9 - 9.0%
Over 90 Days Outstanding	10.8%	5.7 - 13.8%
Total	100.0%	100.0 - 100.0%
Average Account Balance:		
Current (0-30 Days Outstanding)	$895	$684 - 1,704
31-60 Days Outstanding	$1,100	$800 - 2,105
61-90 Days Outstanding	$922	$611 - 1,421
Over 90 Days Outstanding	$1,098	$831 - 2,327
Total	$952	$752 - 1,371
Aging of Receivable Accounts:		
Current (0-30 Days Outstanding)	64.0%	56.5 - 76.7%
31-60 Days Outstanding	19.5%	13.2 - 25.4%
61-90 Days Outstanding	8.0%	5.1 - 10.6%
Over 90 Days Outstanding	8.5%	4.2 - 10.6%
Total	100.0%	100.0 - 100.0%

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

REGION: EAST CENTRAL (IN, OH, WESTERN PA, WV)

	TYPICAL	MIDDLE RANGE
INCOME STATEMENT		
Net Sales	100.0%	100.0 - 100.0%
Cost of Goods Sold	74.8%	71.3 - 78.6%
Gross Margin	25.2%	21.4 - 28.7%
Operating Expenses:		
Selling Expenses	7.1%	6.0 - 8.2%
Delivery Expenses	1.9%	1.5 - 2.5%
Warehouse Expenses	3.0%	2.3 - 3.6%
General & Administrative Expenses	9.0%	6.4 - 10.7%
Occupancy Expenses	1.7%	1.1 - 2.6%
Other Operating Expenses	0.0%	0.0 - 0.8%
Total Operating Expenses	23.7%	20.5 - 26.5%
Net Operating Profit	1.3%	0.6 - 3.2%
Non-Operating Income	1.8%	1.0 - 2.3%
Non-Operating Expenses	1.6%	1.2 - 2.6%
Net Profit Before Tax	1.3%	0.5 - 2.5%
Net Profit After Tax	1.3%	0.5 - 1.9%
OPERATING EXPENSE CONTROL		
Total Operating Expense to Net Sales	23.7%	20.5 - 26.5%
Total Operating Expense to Gross Margin	94.7%	88.7 - 97.1%
Non-People Expense to Net Sales	8.1%	6.8 - 9.2%
Non-People Expense to Gross Margin	33.0%	29.1 - 37.8%
INTEREST EXPENSE		
Interest Expense to Net Sales	0.9%	0.4 - 1.8%
Times Interest Earned	2.4X	1.6 - 4.6X
BALANCE SHEET		
Cash	5.3%	0.6 - 7.6%
Accounts & Notes Receivable, Trade(Net)	27.6%	23.2 - 33.8%
Inventory	52.8%	47.0 - 59.3%
Other Current Assets	1.1%	0.4 - 1.3%
Total Current Assets	86.9%	82.6 - 93.2%
All Other Assets	13.1%	6.8 - 17.4%
Total Assets	100.0%	100.0 - 100.0%
Total Current Liabilities	37.0%	22.1 - 49.7%
Total Long-Term Liabilities	13.3%	3.5 - 19.1%
Total Liabilities	50.4%	31.7 - 64.4%
Total Net Worth	49.6%	35.6 - 68.3%
Total Liabilities & Net Worth	100.0%	100.0 - 100.0%

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

REGION: SOUTHERN (AL, FL, GA, KY, MS, NC, SC, TN, VA)

	TYPICAL	MIDDLE RANGE
OVERALL PERFORMANCE		
Net Profit After Tax to Net Worth	10.85%	6.74 - 15.40%
Total Assets to Net Worth	1.93X	1.66 - 2.97X
Net Profit After Tax to Total Assets	4.93%	3.61 - 8.04%
Net Sales to Total Assets	2.45X	2.09 - 3.20X
Net Profit After Tax to Net Sales	2.00%	1.30 - 2.60%
Net Profit Before Tax to Net Worth	15.74%	8.53 - 23.30%
Net Profit Before Tax to Total Assets	6.56%	4.55 - 10.99%
EBIT to Total Assets	8.02%	6.59 - 12.08%
SALES ANALYSIS		
Net Sales($000)	$4,833	$2,093 - 11,459
Percent Sales Change from Prior Year	10.04%	4.58 - 17.42%
Sales Mix:		
Direct Sales	13.2%	5.1 - 19.8%
Warehouse Sales - Counter and Delivery	86.8%	80.2 - 94.9%
TOTAL SALES	100.0%	100.0 - 100.0%
PRODUCT SALES MIX		
Plumbing Supplies & Equipment	61.5%	30.8 - 95.1%
Heating & Cooling Supplies & Equipment	11.6%	0.0 - 15.8%
Industrial P-V-F (Pipes-Valves-Fittings)	11.8%	0.0 - 11.8%
Other Industrial Supplies & Equipment	2.4%	0.0 - 5.0%
Other Products	12.6%	0.0 - 20.5%
TOTAL SALES	100.0%	100.0 - 100.0%
GROSS MARGIN		
Gross Margin on Net Sales	22.2%	19.5 - 24.2%
Gross Margin on Direct Shipments	10.5%	8.7 - 14.1%
Gross Margin on Warehouse Sales	22.0%	20.8 - 24.6%
ASSET AND FINANCIAL MANAGEMENT		
Current Asset Turn (Sales/Current Assets)	3.00X	2.54 - 3.50X
Total Debt to Net Worth	93.4%	65.4 - 197.0%
Current Debt to Net Worth	65.1%	41.9 - 151.4%
Current Assets to Current Debt	2.54X	1.66 - 3.18X
Current Assets Minus Inventory/Curr Debt	1.21X	0.70 - 1.63X
INVOICE/TRANSACTION DATA		
Billing Lines Per Invoice	6.0	4.5 - 10.0
Average Invoice Size	$176	$107 - 246
Average Billing Line	$23.40	$12.20 - 48.16

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

REGION: SOUTHERN (AL, FL, GA, KY, MS, NC, SC, TN, VA)

	TYPICAL	MIDDLE RANGE
PERSONNEL PRODUCTIVITY		
Sales Per Employee	$196,486	$145,422 - 247,769
Gross Margin Per Employee	$38,879	$33,391 - 48,510
Average Compensation Per Employee	$19,568	$17,156 - 22,567
Average Fringe Benefits Per Employee	$3,588	$2,375 - 4,429
Compensation & Fringes Per Employee	$22,841	$18,725 - 26,540
Payroll to Net Sales	10.4%	9.4 - 11.3%
Fringe Benefits to Net Sales	1.5%	1.3 - 2.0%
Payroll & Fringes to Net Sales	11.6%	10.4 - 12.7%
Payroll to Gross Margin	48.3%	45.3 - 53.3%
Fringe Benefits to Gross Margin	7.2%	6.4 - 10.3%
Payroll & Fringes to Gross Margin	55.9%	49.0 - 59.7%
INVENTORY MANAGEMENT		
Cost of Whse Goods Sold to Ave Inventory	3.93X	3.41 - 4.86X
No. of Days Average Inventory Carried	93 Days	75 - 107 Days
Total Cost of Goods Sold to Ave Inventory	4.84X	3.54 - 5.85X
Whse Gross Margin Return on Ave Inventory	114%	88 - 151%
Turn & Earn Profitability Index	87%	68 - 114%
Percent of Firms on LIFO	37.50%	
ACCOUNTS RECEIVABLE		
Average Collection Period	48 Days	41 - 54 Days
Gross Margin Return on Receivables	164%	142 - 197%
Aging of Receivable Dollars:		
Current (0-30 Days Outstanding)	68.8%	62.5 - 73.6%
31-60 Days Outstanding	17.0%	11.9 - 21.4%
61-90 Days Outstanding	6.0%	4.4 - 7.9%
Over 90 Days Outstanding	8.1%	3.8 - 10.7%
Total	100.0%	100.0 - 100.0%
Average Account Balance:		
Current (0-30 Days Outstanding)	$1,529	$637 - 2,071
31-60 Days Outstanding	$1,251	$634 - 2,791
61-90 Days Outstanding	$1,102	$398 - 2,771
Over 90 Days Outstanding	$930	$534 - 2,445
Total	$1,539	$728 - 2,882
Aging of Receivable Accounts:		
Current (0-30 Days Outstanding)	70.0%	56.8 - 80.5%
31-60 Days Outstanding	16.3%	12.2 - 21.8%
61-90 Days Outstanding	6.4%	3.8 - 8.4%
Over 90 Days Outstanding	7.3%	3.0 - 14.2%
Total	100.0%	100.0 - 100.0%

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

REGION: SOUTHERN (AL, FL, GA, KY, MS, NC, SC, TN, VA)

	TYPICAL	MIDDLE RANGE
INCOME STATEMENT		
Net Sales	100.0%	100.0 - 100.0%
Cost of Goods Sold	78.6%	75.8 - 80.5%
Gross Margin	22.2%	19.5 - 24.2%
Operating Expenses:		
Selling Expenses	5.8%	4.7 - 7.1%
Delivery Expenses	1.6%	0.6 - 2.0%
Warehouse Expenses	1.9%	1.2 - 2.8%
General & Administrative Expenses	7.1%	5.6 - 9.6%
Occupancy Expenses	1.4%	1.0 - 2.1%
Other Operating Expenses	0.1%	0.0 - 1.1%
Total Operating Expenses	19.6%	17.6 - 22.3%
Net Operating Profit	1.8%	1.0 - 3.3%
Non-Operating Income	1.8%	1.0 - 2.9%
Non-Operating Expenses	1.9%	1.2 - 2.7%
Net Profit Before Tax	2.2%	1.1 - 3.6%
Net Profit After Tax	2.0%	1.3 - 2.6%
OPERATING EXPENSE CONTROL		
Total Operating Expense to Net Sales	19.6%	17.6 - 22.3%
Total Operating Expense to Gross Margin	90.9%	85.9 - 95.6%
Non-People Expense to Net Sales	7.0%	5.7 - 7.8%
Non-People Expense to Gross Margin	32.6%	28.2 - 34.6%
INTEREST EXPENSE		
Interest Expense to Net Sales	0.7%	0.5 - 1.3%
Times Interest Earned	4.3X	1.9 - 10.6X
BALANCE SHEET		
Cash	5.4%	0.9 - 8.7%
Accounts & Notes Receivable, Trade(Net)	30.4%	25.5 - 37.5%
Inventory	47.5%	41.8 - 55.5%
Other Current Assets	2.3%	0.2 - 3.3%
Total Current Assets	85.6%	78.0 - 93.5%
All Other Assets	14.4%	6.5 - 22.0%
Total Assets	100.0%	100.0 - 100.0%
Total Current Liabilities	32.9%	24.8 - 40.2%
Total Long-Term Liabilities	14.8%	3.2 - 22.5%
Total Liabilities	47.7%	38.2 - 57.9%
Total Net Worth	52.3%	42.1 - 61.8%
Total Liabilities & Net Worth	100.0%	100.0 - 100.0%

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

REGION: MICHIGAN (EXCLUDING UPPER MI)

	TYPICAL	MIDDLE RANGE
OVERALL PERFORMANCE		
Net Profit After Tax to Net Worth	7.17%	4.37 - 12.07%
Total Assets to Net Worth	1.66X	1.38 - 1.97X
Net Profit After Tax to Total Assets	3.94%	1.73 - 8.45%
Net Sales to Total Assets	2.39X	2.18 - 2.81X
Net Profit After Tax to Net Sales	1.70%	0.90 - 3.40%
Net Profit Before Tax to Net Worth	10.76%	4.70 - 17.01%
Net Profit Before Tax to Total Assets	5.61%	2.39 - 12.69%
EBIT to Total Assets	7.59%	5.18 - 13.17%
SALES ANALYSIS		
Net Sales ($000)	$5,715	$2,694 - 11,643
Percent Sales Change from Prior Year	10.75%	7.62 - 20.71%
Sales Mix:		
Direct Sales	8.0%	0.7 - 13.8%
Warehouse Sales - Counter and Delivery	92.0%	86.1 - 99.2%
TOTAL SALES	100.0%	100.0 - 100.0%
PRODUCT SALES MIX		
Plumbing Supplies & Equipment	51.3%	5.0 - 85.0%
Heating & Cooling Supplies & Equipment	13.3%	0.0 - 25.0%
Industrial P-V-F (Pipes-Valves-Fittings)	26.1%	0.0 - 38.0%
Other Industrial Supplies & Equipment	4.1%	0.0 - 4.1%
Other Products	5.3%	0.0 - 10.0%
TOTAL SALES	100.0%	100.0 - 100.0%
GROSS MARGIN		
Gross Margin on Net Sales	25.6%	23.6 - 27.6%
Gross Margin on Direct Shipments	11.2%	8.5 - 22.0%
Gross Margin on Warehouse Sales	25.9%	25.0 - 27.3%
ASSET AND FINANCIAL MANAGEMENT		
Current Asset Turn (Sales/Current Assets)	2.89X	2.62 - 3.29X
Total Debt to Net Worth	66.5%	38.0 - 97.3%
Current Debt to Net Worth	45.2%	37.3 - 85.2%
Current Assets to Current Debt	3.06X	2.18 - 3.72X
Current Assets Minus Inventory/Curr Debt	1.23X	0.88 - 1.98X
INVOICE/TRANSACTION DATA		
Billing Lines Per Invoice	5.0	4.1 - 7.7
Average Invoice Size	$193	$136 - 292
Average Billing Line	$35.61	$21.84 - 69.36

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

REGION: MICHIGAN (EXCLUDING UPPER MI)

	TYPICAL	MIDDLE RANGE
PERSONNEL PRODUCTIVITY		
Sales Per Employee	$205,803	$154,033 - 255,915
Gross Margin Per Employee	$52,299	$44,874 - 63,766
Average Compensation Per Employee	$24,582	$21,225 - 28,658
Average Fringe Benefits Per Employee	$5,353	$4,120 - 7,023
Compensation & Fringes Per Employee	$29,583	$24,740 - 35,874
Payroll to Net Sales	12.6%	10.8 - 14.1%
Fringe Benefits to Net Sales	2.7%	2.0 - 3.2%
Payroll & Fringes to Net Sales	14.4%	12.2 - 17.0%
Payroll to Gross Margin	48.5%	42.7 - 52.4%
Fringe Benefits to Gross Margin	11.0%	7.5 - 12.7%
Payroll & Fringes to Gross Margin	58.4%	47.7 - 62.1%
INVENTORY MANAGEMENT		
Cost of Whse Goods Sold to Ave Inventory	3.67X	2.98 - 4.31X
No. of Days Average Inventory Carried	99 Days	85 - 123 Days
Total Cost of Goods Sold to Ave Inventory	3.83X	3.39 - 4.93X
Whse Gross Margin Return on Ave Inventory	128%	111 - 147%
Turn & Earn Profitability Index	92%	81 - 106%
Percent of Firms on LIFO	63.16%	
ACCOUNTS RECEIVABLE		
Average Collection Period	46 Days	39 - 52 Days
Gross Margin Return on Receivables	207%	172 - 239%
Aging of Receivable Dollars:		
Current (0-30 Days Outstanding)	61.3%	51.4 - 65.2%
31-60 Days Outstanding	20.8%	13.5 - 26.4%
61-90 Days Outstanding	8.4%	5.8 - 11.6%
Over 90 Days Outstanding	9.4%	2.9 - 9.4%
Total	100.0%	100.0 - 100.0%
Average Account Balance:		
Current (0-30 Days Outstanding)	$1,318	$633 - 2,252
31-60 Days Outstanding	$1,200	$728 - 2,677
61-90 Days Outstanding	$1,200	$795 - 2,208
Over 90 Days Outstanding	$2,095	$957 - 2,799
Total	$1,307	$569 - 2,256
Aging of Receivable Accounts:		
Current (0-30 Days Outstanding)	64.1%	59.8 - 71.0%
31-60 Days Outstanding	19.6%	16.3 - 22.2%
61-90 Days Outstanding	8.9%	4.3 - 14.3%
Over 90 Days Outstanding	7.3%	4.1 - 8.3%
Total	100.0%	100.0 - 100.0%

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

REGION: MICHIGAN (EXCLUDING UPPER MI)

	TYPICAL	MIDDLE RANGE
INCOME STATEMENT		
Net Sales	100.0%	100.0 - 100.0%
Cost of Goods Sold	75.7%	72.4 - 76.4%
Gross Margin	25.6%	23.6 - 27.6%
Operating Expenses:		
Selling Expenses	6.4%	5.5 - 8.5%
Delivery Expenses	1.8%	1.6 - 3.0%
Warehouse Expenses	2.4%	1.5 - 4.0%
General & Administrative Expenses	8.6%	6.9 - 11.4%
Occupancy Expenses	1.3%	1.2 - 2.1%
Other Operating Expenses	0.0%	0.0 - 0.6%
Total Operating Expenses	22.6%	20.3 - 23.8%
Net Operating Profit	1.9%	1.1 - 5.9%
Non-Operating Income	1.0%	0.3 - 2.2%
Non-Operating Expenses	1.1%	0.1 - 2.1%
Net Profit Before Tax	2.0%	0.7 - 6.6%
Net Profit After Tax	1.7%	0.9 - 3.4%
OPERATING EXPENSE CONTROL		
Total Operating Expense to Net Sales	22.6%	20.3 - 23.8%
Total Operating Expense to Gross Margin	91.7%	77.1 - 95.9%
Non-People Expense to Net Sales	7.4%	6.4 - 8.6%
Non-People Expense to Gross Margin	29.8%	23.6 - 36.2%
INTEREST EXPENSE		
Interest Expense to Net Sales	0.7%	0.4 - 1.1%
Times Interest Earned	4.5X	1.8 - 14.2X
BALANCE SHEET		
Cash	8.3%	0.1 - 15.4%
Accounts & Notes Receivable, Trade(Net)	28.6%	24.8 - 35.5%
Inventory	47.9%	39.8 - 55.4%
Other Current Assets	1.0%	0.5 - 1.6%
Total Current Assets	85.8%	79.4 - 92.5%
All Other Assets	14.2%	7.5 - 20.6%
Total Assets	100.0%	100.0 - 100.0%
Total Current Liabilities	31.2%	18.7 - 42.6%
Total Long-Term Liabilities	7.9%	0.0 - 15.1%
Total Liabilities	39.1%	27.3 - 49.7%
Total Net Worth	60.9%	50.3 - 72.7%
Total Liabilities & Net Worth	100.0%	100.0 - 100.0%

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

REGION: METRO CHICAGO & NORTHERN IL

	TYPICAL	MIDDLE RANGE
OVERALL PERFORMANCE		
Net Profit After Tax to Net Worth	9.17%	5.61 - 12.91%
Total Assets to Net Worth	2.28X	1.46 - 3.81X
Net Profit After Tax to Total Assets	5.09%	3.05 - 5.91%
Net Sales to Total Assets	2.59X	2.07 - 3.11X
Net Profit After Tax to Net Sales	1.60%	1.00 - 2.60%
Net Profit Before Tax to Net Worth	12.61%	9.49 - 15.19%
Net Profit Before Tax to Total Assets	5.39%	4.11 - 7.64%
EBIT to Total Assets	6.67%	5.86 - 8.67%
SALES ANALYSIS		
Net Sales($000)	$7,386	$3,389 - 14,392
Percent Sales Change from Prior Year	14.22%	4.75 - 21.21%
Sales Mix:		
Direct Sales	11.8%	6.2 - 16.7%
Warehouse Sales - Counter and Delivery	88.2%	83.3 - 93.8%
TOTAL SALES	100.0%	100.0 - 100.0%
PRODUCT SALES MIX		
Plumbing Supplies & Equipment	31.3%	2.5 - 63.0%
Heating & Cooling Supplies & Equipment	21.1%	0.0 - 39.0%
Industrial P-V-F (Pipes-Valves-Fittings)	45.2%	2.5 - 90.0%
Other Industrial Supplies & Equipment	1.2%	0.0 - 1.2%
Other Products	1.1%	0.0 - 2.6%
TOTAL SALES	100.0%	100.0 - 100.0%
GROSS MARGIN		
Gross Margin on Net Sales	29.4%	26.8 - 34.8%
Gross Margin on Direct Shipments	12.0%	11.0 - 14.8%
Gross Margin on Warehouse Sales	31.4%	28.5 - 35.9%
ASSET AND FINANCIAL MANAGEMENT		
Current Asset Turn (Sales/Current Assets)	2.75X	2.37 - 3.27X
Total Debt to Net Worth	102.3%	36.7 - 180.4%
Current Debt to Net Worth	82.6%	32.3 - 160.0%
Current Assets to Current Debt	2.24X	1.43 - 3.76X
Current Assets Minus Inventory/Curr Debt	0.96X	0.68 - 1.70X
INVOICE/TRANSACTION DATA		
Billing Lines Per Invoice	6.0	3.9 - 8.2
Average Invoice Size	$250	$202 - 301
Average Billing Line	$41.61	$37.74 - 55.10

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

REGION: METRO CHICAGO & NORTHERN IL

	TYPICAL	MIDDLE RANGE
PERSONNEL PRODUCTIVITY		
Sales Per Employee	$197,796	$171,129 - 245,312
Gross Margin Per Employee	$53,809	$49,615 - 60,029
Average Compensation Per Employee	$27,038	Insufficient Data
Average Fringe Benefits Per Employee	$6,330	Insufficient Data
Compensation & Fringes Per Employee	$32,040	$5,469 - 37,024
Payroll to Net Sales	15.1%	12.0 - 17.1%
Fringe Benefits to Net Sales	3.1%	2.2 - 3.7%
Payroll & Fringes to Net Sales	17.1%	6.3 - 20.2%
Payroll to Gross Margin	52.4%	46.8 - 53.9%
Fringe Benefits to Gross Margin	9.8%	9.4 - 11.6%
Payroll & Fringes to Gross Margin	62.9%	22.1 - 63.5%
INVENTORY MANAGEMENT		
Cost of Whse Goods Sold to Ave Inventory	3.45X	2.27 - 4.14X
No. of Days Average Inventory Carried	106 Days	88 - 165 Days
Total Cost of Goods Sold to Ave Inventory	4.20X	2.83 - 4.64X
Whse Gross Margin Return on Ave Inventory	153%	124 - 190%
Turn & Earn Profitability Index	113%	99 - 133%
Percent of Firms on LIFO	55.56%	
ACCOUNTS RECEIVABLE		
Average Collection Period	57 Days	38 - 71 Days
Gross Margin Return on Receivables	153%	Insufficient Data
Aging of Receivable Dollars:		
Current (0-30 Days Outstanding)	60.5%	46.0 - 79.6%
31-60 Days Outstanding	18.9%	10.8 - 24.3%
61-90 Days Outstanding	11.8%	5.5 - 16.1%
Over 90 Days Outstanding	8.8%	2.4 - 16.1%
Total	100.0%	100.0 - 100.0%
Average Account Balance:		
Current (0-30 Days Outstanding)		Insufficient Data
31-60 Days Outstanding		Insufficient Data
61-90 Days Outstanding		Insufficient Data
Over 90 Days Outstanding		Insufficient Data
Total		Insufficient Data
Aging of Receivable Accounts:		
Current (0-30 Days Outstanding)		Insufficient Data
31-60 Days Outstanding		Insufficient Data
61-90 Days Outstanding		Insufficient Data
Over 90 Days Outstanding		Insufficient Data
Total		Insufficient Data

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

REGION: METRO CHICAGO & NORTHERN IL

	TYPICAL	MIDDLE RANGE
INCOME STATEMENT		
Net Sales	100.0%	100.0 - 100.0%
Cost of Goods Sold	71.6%	65.2 - 73.2%
Gross Margin	29.4%	26.8 - 34.8%
Operating Expenses:		
Selling Expenses	7.2%	4.8 - 8.3%
Delivery Expenses	3.3%	1.4 - 4.8%
Warehouse Expenses	3.6%	2.4 - 3.9%
General & Administrative Expenses	12.5%	8.3 - 17.5%
Occupancy Expenses	1.7%	1.2 - 2.1%
Other Operating Expenses	0.0%	0.0 - 0.0%
Total Operating Expenses	26.1%	25.4 - 31.5%
Net Operating Profit	2.3%	0.9 - 3.3%
Non-Operating Income	2.0%	0.8 - 2.3%
Non-Operating Expenses	1.3%	0.0 - 1.9%
Net Profit Before Tax	2.0%	1.0 - 2.9%
Net Profit After Tax	1.6%	1.0 - 2.6%
OPERATING EXPENSE CONTROL		
Total Operating Expense to Net Sales	26.1%	25.4 - 31.5%
Total Operating Expense to Gross Margin	92.0%	90.5 - 95.8%
Non-People Expense to Net Sales	8.5%	Insufficient Data
Non-People Expense to Gross Margin	31.2%	Insufficient Data
INTEREST EXPENSE		
Interest Expense to Net Sales	0.7%	0.4 - 1.6%
Times Interest Earned	5.4X	2.2 - 6.0X
BALANCE SHEET		
Cash	5.4%	0.8 - 6.8%
Accounts & Notes Receivable, Trade(Net)	35.8%	27.3 - 42.2%
Inventory	49.1%	42.0 - 56.2%
Other Current Assets	1.2%	0.2 - 2.8%
Total Current Assets	91.6%	88.9 - 95.6%
All Other Assets	8.4%	4.4 - 11.1%
Total Assets	100.0%	100.0 - 100.0%
Total Current Liabilities	47.4%	21.1 - 75.4%
Total Long-Term Liabilities	6.5%	0.3 - 10.6%
Total Liabilities	53.9%	21.1 - 78.6%
Total Net Worth	46.1%	21.4 - 78.9%
Total Liabilities & Net Worth	100.0%	100.0 - 100.0%

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

REGION: MID AMERICA (IA, KS, MN, MO, NE, ND, SD, UPPER MI, WI

	TYPICAL	MIDDLE RANGE
OVERALL PERFORMANCE		
Net Profit After Tax to Net Worth	5.63%	0.08 - 10.29%
Total Assets to Net Worth	1.86X	1.46 - 3.20X
Net Profit After Tax to Total Assets	2.83%	0.05 - 4.88%
Net Sales to Total Assets	2.29X	1.93 - 2.76X
Net Profit After Tax to Net Sales	1.10%	0.00 - 2.40%
Net Profit Before Tax to Net Worth	8.35%	0.22 - 20.10%
Net Profit Before Tax to Total Assets	4.11%	0.21 - 7.87%
EBIT to Total Assets	7.61%	3.60 - 10.27%
SALES ANALYSIS		
Net Sales($000)	$5,098	$3,109 - 15,068
Percent Sales Change from Prior Year	-1.05%	-7.66 - 6.80%
Sales Mix:		
Direct Sales	12.7%	7.0 - 16.9%
Warehouse Sales - Counter and Delivery	87.3%	83.1 - 93.0%
TOTAL SALES	100.0%	100.0 - 100.0%
PRODUCT SALES MIX		
Plumbing Supplies & Equipment	52.6%	37.3 - 73.8%
Heating & Cooling Supplies & Equipment	16.8%	2.3 - 29.3%
Industrial P-V-F (Pipes-Valves-Fittings)	15.7%	0.0 - 15.8%
Other Industrial Supplies & Equipment	3.9%	0.0 - 4.3%
Other Products	10.9%	0.0 - 16.0%
TOTAL SALES	100.0%	100.0 - 100.0%
GROSS MARGIN		
Gross Margin on Net Sales	25.1%	22.1 - 26.6%
Gross Margin on Direct Shipments	12.9%	9.3 - 15.2%
Gross Margin on Warehouse Sales	24.6%	23.3 - 27.5%
ASSET AND FINANCIAL MANAGEMENT		
Current Asset Turn (Sales/Current Assets)	2.66X	2.27 - 3.10X
Total Debt to Net Worth	86.5%	45.7 - 220.1%
Current Debt to Net Worth	57.7%	36.6 - 179.5%
Current Assets to Current Debt	2.80X	1.83 - 3.78X
Current Assets Minus Inventory/Curr Debt	1.04X	0.72 - 1.47X
INVOICE/TRANSACTION DATA		
Billing Lines Per Invoice	5.0	4.0 - 6.5
Average Invoice Size	$179	$120 - 215
Average Billing Line	$33.05	$23.99 - 51.24

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

REGION: MID AMERICA (IA, KS, MN, MO, NE, ND, SD, UPPER MI, WI

	TYPICAL	MIDDLE RANGE
PERSONNEL PRODUCTIVITY		
Sales Per Employee	$177,279	$153,595 - 212,692
Gross Margin Per Employee	$44,136	$35,303 - 51,575
Average Compensation Per Employee	$22,306	$19,325 - 24,878
Average Fringe Benefits Per Employee	$3,624	$2,898 - 4,779
Compensation & Fringes Per Employee	$26,113	$22,644 - 29,463
Payroll to Net Sales	12.4%	11.2 - 13.8%
Fringe Benefits to Net Sales	1.9%	1.7 - 2.5%
Payroll & Fringes to Net Sales	14.3%	12.5 - 16.2%
Payroll to Gross Margin	49.2%	47.1 - 54.4%
Fringe Benefits to Gross Margin	8.2%	6.9 - 10.0%
Payroll & Fringes to Gross Margin	57.5%	54.8 - 62.6%
INVENTORY MANAGEMENT		
Cost of Whse Goods Sold to Ave Inventory	3.17X	2.41 - 3.69X
No. of Days Average Inventory Carried	115 Days	99 - 151 Days
Total Cost of Goods Sold to Ave Inventory	3.43X	2.60 - 4.31X
Whse Gross Margin Return on Ave Inventory	103%	91 - 124%
Turn & Earn Profitability Index	77%	64 - 87%
Percent of Firms on LIFO	69.57%	
ACCOUNTS RECEIVABLE		
Average Collection Period	45 Days	39 - 56 Days
Gross Margin Return on Receivables	185%	153 - 243%
Aging of Receivable Dollars:		
Current (0-30 Days Outstanding)	65.4%	59.0 - 73.6%
31-60 Days Outstanding	17.0%	13.7 - 20.7%
61-90 Days Outstanding	7.8%	5.6 - 9.9%
Over 90 Days Outstanding	9.8%	4.0 - 14.4%
Total	100.0%	100.0 - 100.0%
Average Account Balance:		
Current (0-30 Days Outstanding)	$929	$679 - 1,736
31-60 Days Outstanding	$1,198	$837 - 2,453
61-90 Days Outstanding	$1,516	$750 - 2,501
Over 90 Days Outstanding	$1,725	$1,008 - 2,396
Total	$1,117	$734 - 1,854
Aging of Receivable Accounts:		
Current (0-30 Days Outstanding)	72.6%	65.3 - 79.6%
31-60 Days Outstanding	14.5%	9.8 - 18.6%
61-90 Days Outstanding	6.3%	4.3 - 8.3%
Over 90 Days Outstanding	6.6%	4.3 - 7.7%
Total	100.0%	100.0 - 100.0%

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

REGION: MID AMERICA (IA, KS, MN, MO, NE, ND, SD, UPPER MI, WI

	TYPICAL	MIDDLE RANGE
INCOME STATEMENT		
Net Sales	100.0%	100.0 - 100.0%
Cost of Goods Sold	75.9%	73.4 - 77.9%
Gross Margin	25.1%	22.1 - 26.6%
Operating Expenses:		
Selling Expenses	6.6%	5.3 - 7.7%
Delivery Expenses	1.7%	1.3 - 2.2%
Warehouse Expenses	2.7%	2.1 - 4.0%
General & Administrative Expenses	8.7%	6.3 - 10.6%
Occupancy Expenses	1.8%	1.3 - 2.8%
Other Operating Expenses	0.0%	0.0 - 0.1%
Total Operating Expenses	22.1%	19.4 - 24.2%
Net Operating Profit	2.1%	0.5 - 3.7%
Non-Operating Income	2.1%	0.9 - 2.6%
Non-Operating Expenses	2.2%	1.4 - 2.6%
Net Profit Before Tax	1.7%	-0.1 - 3.8%
Net Profit After Tax	1.1%	0.0 - 2.4%
OPERATING EXPENSE CONTROL		
Total Operating Expense to Net Sales	22.1%	19.4 - 24.2%
Total Operating Expense to Gross Margin	90.8%	85.4 - 98.1%
Non-People Expense to Net Sales	7.3%	6.5 - 8.3%
Non-People Expense to Gross Margin	30.6%	25.3 - 35.9%
INTEREST EXPENSE		
Interest Expense to Net Sales	1.2%	0.8 - 1.9%
Times Interest Earned	1.9X	0.9 - 4.7X
BALANCE SHEET		
Cash	4.3%	0.1 - 4.3%
Accounts & Notes Receivable, Trade(Net)	29.1%	23.6 - 34.2%
Inventory	51.4%	42.4 - 60.3%
Other Current Assets	1.5%	0.2 - 1.5%
Total Current Assets	86.3%	80.5 - 92.8%
All Other Assets	13.7%	7.2 - 19.5%
Total Assets	100.0%	100.0 - 100.0%
Total Current Liabilities	36.4%	21.5 - 51.6%
Total Long-Term Liabilities	14.2%	2.2 - 21.2%
Total Liabilities	50.6%	31.4 - 68.0%
Total Net Worth	49.4%	32.0 - 68.6%
Total Liabilities & Net Worth	100.0%	100.0 - 100.0%

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

REGION: LOUISIANA, TEXAS, NEW MEXICO, OKLAHOMA & ARKANSAS

	TYPICAL	MIDDLE RANGE
OVERALL PERFORMANCE		
Net Profit After Tax to Net Worth	3.73%	-0.83 - 10.41%
Total Assets to Net Worth	1.88X	1.46 - 3.04X
Net Profit After Tax to Total Assets	2.06%	-0.62 - 4.14%
Net Sales to Total Assets	2.38X	1.96 - 3.00X
Net Profit After Tax to Net Sales	0.90%	-0.30 - 1.50%
Net Profit Before Tax to Net Worth	4.72%	-0.59 - 12.87%
Net Profit Before Tax to Total Assets	2.94%	-3.12 - 6.03%
EBIT to Total Assets	4.85%	1.30 - 6.89%
SALES ANALYSIS		
Net Sales ($000)	$6,907	$3,407 - 12,041
Percent Sales Change from Prior Year	-5.17%	-12.71 - 4.11%
Sales Mix:		
Direct Sales	6.8%	0.1 - 10.1%
Warehouse Sales - Counter and Delivery	93.2%	89.9 - 99.9%
TOTAL SALES	100.0%	100.0 - 100.0%
PRODUCT SALES MIX		
Plumbing Supplies & Equipment	67.8%	48.5 - 99.3%
Heating & Cooling Supplies & Equipment	6.3%	0.0 - 10.0%
Industrial P-V-F (Pipes-Valves-Fittings)	13.9%	0.0 - 13.9%
Other Industrial Supplies & Equipment	2.9%	0.0 - 5.0%
Other Products	9.2%	0.0 - 15.0%
TOTAL SALES	100.0%	100.0 - 100.0%
GROSS MARGIN		
Gross Margin on Net Sales	25.6%	20.5 - 27.5%
Gross Margin on Direct Shipments	9.7%	9.0 - 17.1%
Gross Margin on Warehouse Sales	27.5%	23.0 - 29.4%
ASSET AND FINANCIAL MANAGEMENT		
Current Asset Turn (Sales/Current Assets)	2.90X	2.47 - 3.60X
Total Debt to Net Worth	88.2%	43.9 - 183.8%
Current Debt to Net Worth	61.9%	36.9 - 100.7%
Current Assets to Current Debt	2.41X	1.68 - 3.12X
Current Assets Minus Inventory/Curr Debt	0.98X	0.75 - 1.62X
INVOICE/TRANSACTION DATA		
Billing Lines Per Invoice	5.0	4.2 - 8.3
Average Invoice Size	$157	$96 - 274
Average Billing Line	$26.92	$17.41 - 43.52

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

REGION: LOUISIANA, TEXAS, NEW MEXICO, OKLAHOMA & ARKANSAS

	TYPICAL	MIDDLE RANGE
PERSONNEL PRODUCTIVITY		
Sales Per Employee	$158,324	$141,342 - 198,693
Gross Margin Per Employee	$40,954	$33,164 - 51,180
Average Compensation Per Employee	$21,100	$18,948 - 22,908
Average Fringe Benefits Per Employee	$2,806	$2,586 - 4,471
Compensation & Fringes Per Employee	$24,441	$21,570 - 27,288
Payroll to Net Sales	13.2%	10.8 - 14.8%
Fringe Benefits to Net Sales	1.8%	1.6 - 3.4%
Payroll & Fringes to Net Sales	14.4%	11.0 - 17.0%
Payroll to Gross Margin	52.7%	45.8 - 56.8%
Fringe Benefits to Gross Margin	8.6%	6.5 - 11.8%
Payroll & Fringes to Gross Margin	61.4%	50.2 - 68.9%
INVENTORY MANAGEMENT		
Cost of Whse Goods Sold to Ave Inventory	3.01X	2.49 - 4.38X
No. of Days Average Inventory Carried	121 Days	83 - 147 Days
Total Cost of Goods Sold to Ave Inventory	4.10X	3.01 - 5.06X
Whse Gross Margin Return on Ave Inventory	128%	95 - 149%
Turn & Earn Profitability Index	88%	69 - 111%
Percent of Firms on LIFO	60.00%	
ACCOUNTS RECEIVABLE		
Average Collection Period	48 Days	42 - 55 Days
Gross Margin Return on Receivables	176%	153 - 225%
Aging of Receivable Dollars:		
Current (0-30 Days Outstanding)	70.9%	57.7 - 82.2%
31-60 Days Outstanding	14.7%	7.4 - 21.1%
61-90 Days Outstanding	6.0%	1.3 - 8.2%
Over 90 Days Outstanding	8.5%	2.2 - 14.3%
Total	100.0%	100.0 - 100.0%
Average Account Balance:		
Current (0-30 Days Outstanding)	$1,009	$575 - 2,250
31-60 Days Outstanding	$968	$529 - 1,538
61-90 Days Outstanding	$867	$448 - 1,631
Over 90 Days Outstanding	$1,142	$659 - 1,525
Total	$971	$606 - 2,128
Aging of Receivable Accounts:		
Current (0-30 Days Outstanding)	75.3%	63.6 - 83.2%
31-60 Days Outstanding	12.1%	6.7 - 18.3%
61-90 Days Outstanding	5.0%	2.9 - 6.8%
Over 90 Days Outstanding	7.6%	3.0 - 9.9%
Total	100.0%	100.0 - 100.0%

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

REGION: LOUISIANA, TEXAS, NEW MEXICO, OKLAHOMA & ARKANSAS

	TYPICAL	MIDDLE RANGE
INCOME STATEMENT		
Net Sales	100.0%	100.0 - 100.0%
Cost of Goods Sold	75.1%	72.5 - 79.5%
Gross Margin	25.6%	20.5 - 27.5%
Operating Expenses:		
Selling Expenses	6.3%	5.1 - 6.9%
Delivery Expenses	2.0%	1.4 - 2.5%
Warehouse Expenses	3.0%	1.8 - 3.9%
General & Administrative Expenses	9.4%	8.0 - 10.8%
Occupancy Expenses	1.6%	0.6 - 3.2%
Other Operating Expenses	0.0%	0.0 - 0.5%
Total Operating Expenses	21.7%	20.5 - 27.3%
Net Operating Profit	0.3%	-0.7 - 2.3%
Non-Operating Income	2.3%	1.6 - 3.3%
Non-Operating Expenses	1.2%	0.7 - 1.9%
Net Profit Before Tax	0.9%	0.6 - 3.7%
Net Profit After Tax	0.9%	-0.3 - 1.5%
OPERATING EXPENSE CONTROL		
Total Operating Expense to Net Sales	21.7%	20.5 - 27.3%
Total Operating Expense to Gross Margin	98.5%	93.3 - 103.0%
Non-People Expense to Net Sales	8.7%	6.9 - 9.7%
Non-People Expense to Gross Margin	34.5%	31.7 - 41.5%
INTEREST EXPENSE		
Interest Expense to Net Sales	0.9%	0.2 - 1.5%
Times Interest Earned	2.5X	0.3 - 7.2X
BALANCE SHEET		
Cash	7.6%	1.5 - 13.5%
Accounts & Notes Receivable, Trade(Net)	26.5%	22.4 - 29.5%
Inventory	46.0%	33.8 - 57.0%
Other Current Assets	2.9%	0.3 - 3.3%
Total Current Assets	83.0%	73.0 - 94.5%
All Other Assets	17.0%	5.5 - 27.0%
Total Assets	100.0%	100.0 - 100.0%
Total Current Liabilities	29.7%	22.5 - 34.7%
Total Long-Term Liabilities	10.8%	0.1 - 14.4%
Total Liabilities	40.5%	27.0 - 53.9%
Total Net Worth	59.5%	46.1 - 73.0%
Total Liabilities & Net Worth	100.0%	100.0 - 100.0%

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

REGION: ROCKY MOUNTAIN (CO, ID, MT, UT, WY)

	TYPICAL	MIDDLE RANGE
OVERALL PERFORMANCE		
Net Profit After Tax to Net Worth	6.24%	Insufficient Data
Total Assets to Net Worth	1.88X	1.38 - 3.75X
Net Profit After Tax to Total Assets	4.74%	Insufficient Data
Net Sales to Total Assets	2.26X	2.18 - 2.41X
Net Profit After Tax to Net Sales	1.80%	Insufficient Data
Net Profit Before Tax to Net Worth	7.86%	1.49 - 26.66%
Net Profit Before Tax to Total Assets	6.89%	0.41 - 10.89%
EBIT to Total Assets	8.53%	Insufficient Data
SALES ANALYSIS		
Net Sales($000)	$2,299	$1,261 - 10,543
Percent Sales Change from Prior Year	-5.64%	Insufficient Data
Sales Mix:		
Direct Sales	4.9%	Insufficient Data
Warehouse Sales - Counter and Delivery	95.1%	Insufficient Data
TOTAL SALES	100.0%	100.0 - 100.0%
PRODUCT SALES MIX		
Plumbing Supplies & Equipment	60.2%	Insufficient Data
Heating & Cooling Supplies & Equipment	8.2%	Insufficient Data
Industrial P-V-F (Pipes-Valves-Fittings)	8.5%	Insufficient Data
Other Industrial Supplies & Equipment	3.2%	Insufficient Data
Other Products	20.0%	Insufficient Data
TOTAL SALES	100.0%	100.0 - 100.0%
GROSS MARGIN		
Gross Margin on Net Sales	29.1%	Insufficient Data
Gross Margin on Direct Shipments		Insufficient Data
Gross Margin on Warehouse Sales	26.2%	Insufficient Data
ASSET AND FINANCIAL MANAGEMENT		
Current Asset Turn (Sales/Current Assets)	2.74X	2.47 - 2.86X
Total Debt to Net Worth	88.0%	37.8 - 275.3%
Current Debt to Net Worth	88.0%	21.3 - 242.9%
Current Assets to Current Debt	2.56X	1.34 - 5.58X
Current Assets Minus Inventory/Curr Debt	0.99X	0.63 - 2.04X
INVOICE/TRANSACTION DATA		
Billing Lines Per Invoice	6.6	Insufficient Data
Average Invoice Size	$94	Insufficient Data
Average Billing Line	$14.45	Insufficient Data

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

REGION: ROCKY MOUNTAIN (CO, ID, MT, UT, WY)

	TYPICAL	MIDDLE RANGE
PERSONNEL PRODUCTIVITY		
Sales Per Employee	$180,896	Insufficient Data
Gross Margin Per Employee	$47,101	Insufficient Data
Average Compensation Per Employee	$22,856	Insufficient Data
Average Fringe Benefits Per Employee	$4,183	Insufficient Data
Compensation & Fringes Per Employee	$27,038	Insufficient Data
Payroll to Net Sales	11.7%	Insufficient Data
Fringe Benefits to Net Sales	2.1%	Insufficient Data
Payroll & Fringes to Net Sales	14.3%	11.3 - 17.3%
Payroll to Gross Margin	45.5%	Insufficient Data
Fringe Benefits to Gross Margin	9.2%	Insufficient Data
Payroll & Fringes to Gross Margin	54.0%	36.8 - 64.9%
INVENTORY MANAGEMENT		
Cost of Whse Goods Sold to Ave Inventory	3.30X	Insufficient Data
No. of Days Average Inventory Carried	111 Days	Insufficient Data
Total Cost of Goods Sold to Ave Inventory	3.82X	Insufficient Data
Whse Gross Margin Return on Ave Inventory	114%	Insufficient Data
Turn & Earn Profitability Index	85%	Insufficient Data
Percent of Firms on LIFO	0.00%	
ACCOUNTS RECEIVABLE		
Average Collection Period	52 Days	Insufficient Data
Gross Margin Return on Receivables	206%	Insufficient Data
Aging of Receivable Dollars:		
Current (0-30 Days Outstanding)	52.7%	Insufficient Data
31-60 Days Outstanding	19.8%	Insufficient Data
61-90 Days Outstanding	12.2%	Insufficient Data
Over 90 Days Outstanding	15.3%	Insufficient Data
Total	100.0%	Insufficient Data
Average Account Balance:		
Current (0-30 Days Outstanding)		Insufficient Data
31-60 Days Outstanding		Insufficient Data
61-90 Days Outstanding		Insufficient Data
Over 90 Days Outstanding		Insufficient Data
Total	$1,020	Insufficient Data
Aging of Receivable Accounts:		
Current (0-30 Days Outstanding)		Insufficient Data
31-60 Days Outstanding		Insufficient Data
61-90 Days Outstanding		Insufficient Data
Over 90 Days Outstanding		Insufficient Data
Total		Insufficient Data

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

REGION: ROCKY MOUNTAIN (CO, ID, MT, UT, WY)

	TYPICAL	MIDDLE RANGE
INCOME STATEMENT		
Net Sales	100.0%	Insufficient Data
Cost of Goods Sold	69.4%	Insufficient Data
Gross Margin	29.1%	Insufficient Data
Operating Expenses:		
Selling Expenses	3.6%	Insufficient Data
Delivery Expenses	2.8%	Insufficient Data
Warehouse Expenses	2.2%	Insufficient Data
General & Administrative Expenses	9.8%	Insufficient Data
Occupancy Expenses	2.5%	Insufficient Data
Other Operating Expenses	0.0%	Insufficient Data
Total Operating Expenses	28.0%	Insufficient Data
Net Operating Profit	2.7%	Insufficient Data
Non-Operating Income	2.2%	Insufficient Data
Non-Operating Expenses	2.1%	Insufficient Data
Net Profit Before Tax	2.3%	Insufficient Data
Net Profit After Tax	1.8%	Insufficient Data
OPERATING EXPENSE CONTROL		
Total Operating Expense to Net Sales	28.0%	Insufficient Data
Total Operating Expense to Gross Margin	91.3%	Insufficient Data
Non-People Expense to Net Sales	7.9%	Insufficient Data
Non-People Expense to Gross Margin	33.0%	Insufficient Data
INTEREST EXPENSE		
Interest Expense to Net Sales	1.2%	Insufficient Data
Times Interest Earned	6.0X	Insufficient Data
BALANCE SHEET		
Cash	3.4%	Insufficient Data
Accounts & Notes Receivable, Trade(Net)	26.6%	Insufficient Data
Inventory	44.3%	Insufficient Data
Other Current Assets	2.0%	Insufficient Data
Total Current Assets	76.3%	Insufficient Data
All Other Assets	23.7%	Insufficient Data
Total Assets	100.0%	Insufficient Data
Total Current Liabilities	32.4%	Insufficient Data
Total Long-Term Liabilities	19.1%	Insufficient Data
Total Liabilities	51.5%	Insufficient Data
Total Net Worth	48.4%	Insufficient Data
Total Liabilities & Net Worth	100.0%	Insufficient Data

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

REGION: PACIFIC NORTHWEST (AK, OR, WA)

	TYPICAL	MIDDLE RANGE
OVERALL PERFORMANCE		
Net Profit After Tax to Net Worth	-4.17%	Insufficient Data
Total Assets to Net Worth	2.10X	Insufficient Data
Net Profit After Tax to Total Assets	-2.24%	Insufficient Data
Net Sales to Total Assets	2.80X	Insufficient Data
Net Profit After Tax to Net Sales	-1.20%	Insufficient Data
Net Profit Before Tax to Net Worth	-5.71%	Insufficient Data
Net Profit Before Tax to Total Assets	-3.21%	Insufficient Data
EBIT to Total Assets	1.19%	Insufficient Data
SALES ANALYSIS		
Net Sales($000)	$6,258	Insufficient Data
Percent Sales Change from Prior Year	-0.78%	Insufficient Data
Sales Mix:		
Direct Sales		Insufficient Data
Warehouse Sales - Counter and Delivery		Insufficient Data
TOTAL SALES	100.0%	Insufficient Data
PRODUCT SALES MIX		
Plumbing Supplies & Equipment	50.3%	Insufficient Data
Heating & Cooling Supplies & Equipment	11.8%	Insufficient Data
Industrial P-V-F (Pipes-Valves-Fittings)	10.8%	Insufficient Data
Other Industrial Supplies & Equipment	0.0%	Insufficient Data
Other Products	27.3%	Insufficient Data
TOTAL SALES	100.0%	Insufficient Data
GROSS MARGIN		
Gross Margin on Net Sales		Insufficient Data
Gross Margin on Direct Shipments		Insufficient Data
Gross Margin on Warehouse Sales		Insufficient Data
ASSET AND FINANCIAL MANAGEMENT		
Current Asset Turn (Sales/Current Assets)	3.24X	Insufficient Data
Total Debt to Net Worth	110.9%	Insufficient Data
Current Debt to Net Worth	89.5%	Insufficient Data
Current Assets to Current Debt	3.07X	Insufficient Data
Current Assets Minus Inventory/Curr Debt	0.80X	Insufficient Data
INVOICE/TRANSACTION DATA		
Billing Lines Per Invoice	4.2	Insufficient Data
Average Invoice Size	$216	Insufficient Data
Average Billing Line	$44.48	Insufficient Data

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

REGION: PACIFIC NORTHWEST (AK, OR, WA)

	TYPICAL	MIDDLE RANGE
PERSONNEL PRODUCTIVITY		
Sales Per Employee	$170,686	Insufficient Data
Gross Margin Per Employee	$41,812	Insufficient Data
Average Compensation Per Employee	$22,778	Insufficient Data
Average Fringe Benefits Per Employee	$4,075	Insufficient Data
Compensation & Fringes Per Employee	$27,039	Insufficient Data
Payroll to Net Sales	11.5%	Insufficient Data
Fringe Benefits to Net Sales	2.0%	Insufficient Data
Payroll & Fringes to Net Sales	13.5%	Insufficient Data
Payroll to Gross Margin	51.3%	Insufficient Data
Fringe Benefits to Gross Margin	9.0%	Insufficient Data
Payroll & Fringes to Gross Margin	60.3%	Insufficient Data
INVENTORY MANAGEMENT		
Cost of Whse Goods Sold to Ave Inventory		Insufficient Data
No. of Days Average Inventory Carried		Insufficient Data
Total Cost of Goods Sold to Ave Inventory	3.97X	Insufficient Data
Whse Gross Margin Return on Ave Inventory		Insufficient Data
Turn & Earn Profitability Index		Insufficient Data
Percent of Firms [illegible] FO	25.00%	
ACCOUNTS RECEIVABLE		
Average Collection Period	36 Days	Insufficient Data
Gross Margin Return on Receivables		Insufficient Data
Aging of Receivable Dollars:		
Current (0-30 Days Outstanding)		Insufficient Data
31-60 Days Outstanding		Insufficient Data
61-90 Days Outstanding		Insufficient Data
Over 90 Days Outstanding		Insufficient Data
Total		Insufficient Data
Average Account Balance:		
Current (0-30 Days Outstanding)		Insufficient Data
31-60 Days Outstanding		Insufficient Data
61-90 Days Outstanding		Insufficient Data
Over 90 Days Outstanding		Insufficient Data
Total		Insufficient Data
Aging of Receivable Accounts:		
Current (0-30 Days Outstanding)		Insufficient Data
31-60 Days Outstanding		Insufficient Data
61-90 Days Outstanding		Insufficient Data
Over 90 Days Outstanding		Insufficient Data
Total		Insufficient Data

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

REGION: PACIFIC NORTHWEST (AK, OR, WA)

	TYPICAL	MIDDLE RANGE
INCOME STATEMENT		
Net Sales		Insufficient Data
Cost of Goods Sold		Insufficient Data
Gross Margin		Insufficient Data
Operating Expenses:		
Selling Expenses		Insufficient Data
Delivery Expenses		Insufficient Data
Warehouse Expenses		Insufficient Data
General & Administrative Expenses		Insufficient Data
Occupancy Expenses		Insufficient Data
Other Operating Expenses		Insufficient Data
Total Operating Expenses		Insufficient Data
Net Operating Profit		Insufficient Data
Non-Operating Income		Insufficient Data
Non-Operating Expenses		Insufficient Data
Net Profit Before Tax		Insufficient Data
Net Profit After Tax	-1.2%	Insufficient Data
OPERATING EXPENSE CONTROL		
Total Operating Expense to Net Sales		Insufficient Data
Total Operating Expense to Gross Margin		Insufficient Data
Non-People Expense to Net Sales		Insufficient Data
Non-People Expense to Gross Margin		Insufficient Data
INTEREST EXPENSE		
Interest Expense to Net Sales	1.8%	Insufficient Data
Times Interest Earned	0.2X	Insufficient Data
BALANCE SHEET		
Cash		Insufficient Data
Accounts & Notes Receivable, Trade (Net)		Insufficient Data
Inventory		Insufficient Data
Other Current Assets		Insufficient Data
Total Current Assets		Insufficient Data
All Other Assets		Insufficient Data
Total Assets		Insufficient Data
Total Current Liabilities		Insufficient Data
Total Long-Term Liabilities		Insufficient Data
Total Liabilities		Insufficient Data
Total Net Worth		Insufficient Data
Total Liabilities & Net Worth		Insufficient Data

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

REGION: NORTHERN CALIFORNIA, NORTHERN NEVADA & HAWAII

	TYPICAL	MIDDLE RANGE
OVERALL PERFORMANCE		
Net Profit After Tax to Net Worth	8.98%	4.38 - 12.13%
Total Assets to Net Worth	1.75X	1.35 - 2.78X
Net Profit After Tax to Total Assets	5.31%	2.49 - 7.68%
Net Sales to Total Assets	2.50X	2.15 - 3.03X
Net Profit After Tax to Net Sales	1.70%	1.00 - 2.90%
Net Profit Before Tax to Net Worth	14.26%	6.00 - 21.38%
Net Profit Before Tax to Total Assets	7.34%	3.52 - 12.27%
EBIT to Total Assets	10.60%	7.46 - 14.25%
SALES ANALYSIS		
Net Sales($000)	$4,873	$2,535 - 47,681
Percent Sales Change from Prior Year	16.64%	6.16 - 26.71%
Sales Mix:		
Direct Sales	12.8%	4.3 - 21.8%
Warehouse Sales - Counter and Delivery	87.2%	78.2 - 95.7%
TOTAL SALES	100.0%	100.0 - 100.0%
PRODUCT SALES MIX		
Plumbing Supplies & Equipment	66.6%	49.3 - 90.8%
Heating & Cooling Supplies & Equipment	10.7%	0.0 - 13.5%
Industrial P-V-F (Pipes-Valves-Fittings)	15.2%	0.0 - 19.0%
Other Industrial Supplies & Equipment	1.9%	0.0 - 5.0%
Other Products	5.6%	0.0 - 10.2%
TOTAL SALES	100.0%	100.0 - 100.0%
GROSS MARGIN		
Gross Margin on Net Sales	25.4%	19.5 - 30.2%
Gross Margin on Direct Shipments	9.8%	8.2 - 12.4%
Gross Margin on Warehouse Sales	25.6%	20.4 - 28.4%
ASSET AND FINANCIAL MANAGEMENT		
Current Asset Turn (Sales/Current Assets)	2.94X	2.41 - 3.57X
Total Debt to Net Worth	74.7%	34.9 - 178.3%
Current Debt to Net Worth	66.2%	27.7 - 116.5%
Current Assets to Current Debt	2.39X	1.93 - 4.74X
Current Assets Minus Inventory/Curr Debt	1.23X	0.84 - 2.08X
INVOICE/TRANSACTION DATA		
Billing Lines Per Invoice	5.0	4.0 - 9.0
Average Invoice Size	$242	$156 - 310
Average Billing Line	$39.54	$26.94 - 59.87

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

REGION: NORTHERN CALIFORNIA, NORTHERN NEVADA & HAWAII

	TYPICAL	MIDDLE RANGE
PERSONNEL PRODUCTIVITY		
Sales Per Employee	$244,691	$196,789 - 303,887
Gross Margin Per Employee	$59,188	$51,436 - 68,149
Average Compensation Per Employee	$27,479	$24,004 - 29,201
Average Fringe Benefits Per Employee	$6,353	$4,943 - 7,631
Compensation & Fringes Per Employee	$34,280	$30,624 - 35,486
Payroll to Net Sales	10.0%	8.9 - 14.0%
Fringe Benefits to Net Sales	2.7%	1.5 - 3.2%
Payroll & Fringes to Net Sales	12.7%	10.9 - 17.1%
Payroll to Gross Margin	45.7%	38.8 - 52.1%
Fringe Benefits to Gross Margin	11.5%	7.8 - 12.3%
Payroll & Fringes to Gross Margin	54.5%	50.2 - 62.9%
INVENTORY MANAGEMENT		
Cost of Whse Goods Sold to Ave Inventory	3.32X	2.69 - 5.40X
No. of Days Average Inventory Carried	110 Days	68 - 135 Days
Total Cost of Goods Sold to Ave Inventory	3.71X	2.85 - 5.89X
Whse Gross Margin Return on Ave Inventory	120%	102 - 165%
Turn & Earn Profitability Index	89%	72 - 109%
Percent of Firms on LIFO	57.14%	
ACCOUNTS RECEIVABLE		
Average Collection Period	45 Days	42 - 59 Days
Gross Margin Return on Receivables	197%	114 - 222%
Aging of Receivable Dollars:		
Current (0-30 Days Outstanding)	66.4%	55.5 - 73.8%
31-60 Days Outstanding	16.0%	11.2 - 20.5%
61-90 Days Outstanding	8.1%	4.5 - 10.3%
Over 90 Days Outstanding	9.6%	3.6 - 13.0%
Total	100.0%	100.0 - 100.0%
Average Account Balance:		
Current (0-30 Days Outstanding)	$1,043	$798 - 3,032
31-60 Days Outstanding	$1,508	$909 - 3,079
61-90 Days Outstanding	$1,429	$917 - 4,958
Over 90 Days Outstanding	$1,972	$975 - 2,698
Total	$1,211	$894 - 3,128
Aging of Receivable Accounts:		
Current (0-30 Days Outstanding)	70.2%	63.4 - 78.5%
31-60 Days Outstanding	15.3%	11.9 - 19.4%
61-90 Days Outstanding	6.2%	4.3 - 8.1%
Over 90 Days Outstanding	8.2%	3.7 - 12.5%
Total	100.0%	100.0 - 100.0%

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

REGION: NORTHERN CALIFORNIA, NORTHERN NEVADA & HAWAII

	TYPICAL	MIDDLE RANGE
INCOME STATEMENT		
Net Sales	100.0%	100.0 - 100.0%
Cost of Goods Sold	77.2%	69.8 - 80.5%
Gross Margin	25.4%	19.5 - 30.2%
Operating Expenses:		
Selling Expenses	4.9%	4.3 - 7.2%
Delivery Expenses	1.6%	1.4 - 1.8%
Warehouse Expenses	3.0%	2.1 - 3.8%
General & Administrative Expenses	8.6%	6.3 - 10.0%
Occupancy Expenses	2.2%	0.9 - 2.7%
Other Operating Expenses	0.0%	0.0 - 0.0%
Total Operating Expenses	18.9%	17.9 - 26.5%
Net Operating Profit	3.5%	2.3 - 8.7%
Non-Operating Income	1.7%	1.3 - 1.8%
Non-Operating Expenses	2.0%	0.8 - 3.0%
Net Profit Before Tax	3.9%	2.1 - 9.0%
Net Profit After Tax	1.7%	1.0 - 2.9%
OPERATING EXPENSE CONTROL		
Total Operating Expense to Net Sales	18.9%	17.9 - 26.5%
Total Operating Expense to Gross Margin	84.2%	72.0 - 89.0%
Non-People Expense to Net Sales	7.0%	5.4 - 9.4%
Non-People Expense to Gross Margin	26.4%	23.8 - 30.6%
INTEREST EXPENSE		
Interest Expense to Net Sales	0.9%	0.3 - 1.9%
Times Interest Earned	4.8X	2.9 - 10.3X
BALANCE SHEET		
Cash	5.1%	0.0 - 9.5%
Accounts & Notes Receivable, Trade(Net)	32.9%	24.7 - 39.8%
Inventory	48.0%	41.1 - 54.0%
Other Current Assets	3.0%	0.3 - 4.1%
Total Current Assets	88.9%	81.8 - 95.4%
All Other Assets	11.1%	4.6 - 18.2%
Total Assets	100.0%	100.0 - 100.0%
Total Current Liabilities	34.8%	20.8 - 43.7%
Total Long-Term Liabilities	11.3%	1.0 - 15.3%
Total Liabilities	46.1%	28.8 - 62.0%
Total Net Worth	53.9%	38.0 - 71.2%
Total Liabilities & Net Worth	100.0%	100.0 - 100.0%

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

REGION: PACIFIC SOUTHWEST (AZ, SOUTHERN CA, SOUTHERN NV)

	TYPICAL	MIDDLE RANGE
OVERALL PERFORMANCE		
Net Profit After Tax to Net Worth	9.95%	Insufficient Data
Total Assets to Net Worth	4.11X	1.69 - 4.52X
Net Profit After Tax to Total Assets	2.25%	Insufficient Data
Net Sales to Total Assets	3.17X	2.06 - 3.52X
Net Profit After Tax to Net Sales	1.00%	Insufficient Data
Net Profit Before Tax to Net Worth	16.32%	1.36 - 28.82%
Net Profit Before Tax to Total Assets	4.12%	0.61 - 8.51%
EBIT to Total Assets	7.87%	Insufficient Data
SALES ANALYSIS		
Net Sales($000)	$6,011	$3,914 - 17,963
Percent Sales Change from Prior Year	24.97%	Insufficient Data
Sales Mix:		
Direct Sales	10.7%	Insufficient Data
Warehouse Sales - Counter and Delivery	89.3%	Insufficient Data
TOTAL SALES	100.0%	100.0 - 100.0%
PRODUCT SALES MIX		
Plumbing Supplies & Equipment	59.3%	Insufficient Data
Heating & Cooling Supplies & Equipment	1.3%	Insufficient Data
Industrial P-V-F (Pipes-Valves-Fittings)	35.8%	Insufficient Data
Other Industrial Supplies & Equipment	0.0%	Insufficient Data
Other Products	3.5%	Insufficient Data
TOTAL SALES	100.0%	100.0 - 100.0%
GROSS MARGIN		
Gross Margin on Net Sales	18.7%	Insufficient Data
Gross Margin on Direct Shipments	7.9%	Insufficient Data
Gross Margin on Warehouse Sales	21.1%	Insufficient Data
ASSET AND FINANCIAL MANAGEMENT		
Current Asset Turn (Sales/Current Assets)	3.59X	2.17 - 3.72X
Total Debt to Net Worth	310.6%	69.3 - 352.2%
Current Debt to Net Worth	277.6%	69.3 - 352.2%
Current Assets to Current Debt	1.30X	1.18 - 2.18X
Current Assets Minus Inventory/Curr Debt	0.83X	0.70 - 1.07X
INVOICE/TRANSACTION DATA		
Billing Lines Per Invoice	5.4	Insufficient Data
Average Invoice Size	$315	Insufficient Data
Average Billing Line	$48.76	Insufficient Data

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

REGION: PACIFIC SOUTHWEST (AZ, SOUTHERN CA, SOUTHERN NV)

	TYPICAL	MIDDLE RANGE
PERSONNEL PRODUCTIVITY		
Sales Per Employee	$331,540	Insufficient Data
Gross Margin Per Employee	$60,636	Insufficient Data
Average Compensation Per Employee	$28,115	Insufficient Data
Average Fringe Benefits Per Employee	$4,772	Insufficient Data
Compensation & Fringes Per Employee	$32,795	Insufficient Data
Payroll to Net Sales	9.8%	Insufficient Data
Fringe Benefits to Net Sales	1.4%	Insufficient Data
Payroll & Fringes to Net Sales	10.6%	7.3 - 12.9%
Payroll to Gross Margin	49.0%	Insufficient Data
Fringe Benefits to Gross Margin	7.2%	Insufficient Data
Payroll & Fringes to Gross Margin	53.3%	44.0 - 61.0%
INVENTORY MANAGEMENT		
Cost of Whse Goods Sold to Ave Inventory	5.97X	Insufficient Data
No. of Days Average Inventory Carried	61 Days	Insufficient Data
Total Cost of Goods Sold to Ave Inventory	6.66X	Insufficient Data
Whse Gross Margin Return on Ave Inventory	140%	Insufficient Data
Turn & Earn Profitability Index	114%	Insufficient Data
Percent of Firms on LIFO	66.67%	
ACCOUNTS RECEIVABLE		
Average Collection Period	57 Days	Insufficient Data
Gross Margin Return on Receivables	135%	Insufficient Data
Aging of Receivable Dollars:		
Current (0-30 Days Outstanding)	68.0%	Insufficient Data
31-60 Days Outstanding	24.6%	Insufficient Data
61-90 Days Outstanding	4.0%	Insufficient Data
Over 90 Days Outstanding	3.3%	Insufficient Data
Total	100.0%	Insufficient Data
Average Account Balance:		
Current (0-30 Days Outstanding)	$3,602	Insufficient Data
31-60 Days Outstanding	$1,907	Insufficient Data
61-90 Days Outstanding	$1,267	Insufficient Data
Over 90 Days Outstanding	$1,649	Insufficient Data
Total	$3,942	Insufficient Data
Aging of Receivable Accounts:		
Current (0-30 Days Outstanding)	70.4%	Insufficient Data
31-60 Days Outstanding	17.1%	Insufficient Data
61-90 Days Outstanding	5.9%	Insufficient Data
Over 90 Days Outstanding	6.6%	Insufficient Data
Total	100.0%	Insufficient Data

AMERICAN SUPPLY ASSOCIATION 1986 ANNUAL OPERATING PERFORMANCE SURVEY

REGION: PACIFIC SOUTHWEST (AZ, SOUTHERN CA, SOUTHERN NV)

	TYPICAL	MIDDLE RANGE
INCOME STATEMENT		
Net Sales	100.0%	Insufficient Data
Cost of Goods Sold	80.3%	Insufficient Data
Gross Margin	18.7%	Insufficient Data
Operating Expenses:		
Selling Expenses	4.8%	Insufficient Data
Delivery Expenses	1.8%	Insufficient Data
Warehouse Expenses	2.3%	Insufficient Data
General & Administrative Expenses	5.6%	Insufficient Data
Occupancy Expenses	0.9%	Insufficient Data
Other Operating Expenses	0.2%	Insufficient Data
Total Operating Expenses	17.4%	Insufficient Data
Net Operating Profit	3.0%	Insufficient Data
Non-Operating Income	1.8%	Insufficient Data
Non-Operating Expenses	1.8%	Insufficient Data
Net Profit Before Tax	1.8%	Insufficient Data
Net Profit After Tax	1.0%	Insufficient Data
OPERATING EXPENSE CONTROL		
Total Operating Expense to Net Sales	17.4%	Insufficient Data
Total Operating Expense to Gross Margin	83.2%	Insufficient Data
Non-People Expense to Net Sales	4.9%	Insufficient Data
Non-People Expense to Gross Margin	27.5%	Insufficient Data
INTEREST EXPENSE		
Interest Expense to Net Sales	1.2%	Insufficient Data
Times Interest Earned	1.8X	Insufficient Data
BALANCE SHEET		
Cash	4.6%	Insufficient Data
Accounts & Notes Receivable, Trade(Net)	43.5%	Insufficient Data
Inventory	36.0%	Insufficient Data
Other Current Assets	6.0%	Insufficient Data
Total Current Assets	90.1%	Insufficient Data
All Other Assets	9.9%	Insufficient Data
Total Assets	100.0%	Insufficient Data
Total Current Liabilities	57.8%	Insufficient Data
Total Long-Term Liabilities	4.0%	Insufficient Data
Total Liabilities	61.8%	Insufficient Data
Total Net Worth	38.2%	Insufficient Data
Total Liabilities & Net Worth	100.0%	Insufficient Data

APPENDIX

Survey Methodology/Demographics

In late March, 1986, the American Supply Association mailed strictly confidential questionnaires to all P-H-C-P wholesaler members. The primary intent of this survey was to collect detailed financial and operating information from member firms by specific geographic region, sales volume size and type of product emphasis.

Once the questionnaires were received by Industry Insights, all company identification, if any, was removed and a confidential company identification code was assigned. The data was then coded, keyed to tape, and edited by Industry Insights financial analysts for validity. Computer processing was then performed on all data to insure statistical validity and to produce the financial and operating ratios contained in this study.

In all, 285 completed and usable questionnaires were received by Industry Insights representing approximately 1,000 different wholesaler locations (including headquarters). In particular, the statistical sample consists of the following:

	Number of Reporting Firms
ALL REPORTING FIRMS	285
BY PRODUCT EMPHASIS:	
Plumbing Supplies & Equipment Firms (those that that obtain more than 50% of sales from plumbing products)	140
Industrial Pipe, Valves and Fittings Firms (those with more than 50% of sales from Industrial P-V-F)	33
Plumbing Supplies & Equipment and Industrial Pipe, Valves and Fittings Firms (those with more than 50% of sales from plumbing and Industrial P-V-F products combined but less than 50% in each category alone)	43
HVAC & Other Emphasis Firms (those companies that cannot be classified in any of the three above groups; or, those firms with less than 50% of sales in combined plumbing supplies and equipment, and Industrial P-V-F products)	69
BY PRODUCT EMPHASIS AND SALES VOLUME SIZE:	
Plumbing Supplies & Equipment Firms:	
Sales Under $3,000,000	42
Sales $3,000,000 to $7,000,000	45
Sales $7,000,000 to $12,000,000	22
Sales Over $12,000,000	31

	Number of Reporting Firms
BY PRODUCT EMPHASIS AND SALES VOLUME SIZE (continued)	
Industrial Pipe, Valves and Fittings Firms:	
Sales Under $4,000,000	6
Sales $4,000,000 to $12,000,000	16
Sales Over $7,000,000	11
Plumbing Supplies & Equipment and Industrial Pipe, Valves and Fittings Firms:	
Sales Under $3,000,000	5
Sales $3,000,000 to $7,000,000	15
Sales Over $7,000,000	23
HVAC & Other Emphasis Firms:	
Sales Under $3,000,000	23
Sales $3,000,000 to $8,000,000	31
Sales Over $8,000,000	14
Sales Volume Not Specified	1
BY GEOGRAPHIC REGION:	
New England (CT, ME, MA, NH, RI, VT)	29
New York (excluding NYC)	18
Long Island and Metro NYC	3
Middle Atlantic (DE, Eastern PA, MD, NJ, DC)	31
East Central (IN, OH, Western PA, WV)	42
Southern (AL, FL, GA, KY, MS, NC SC, TN, VA)	26
Michigan (excluding Upper MI)	20
Metro Chicago and Northern IL	9
Mid-America (IA, Southern IL, KS, MN, MO, NE, ND, SD, Upper MI, WI)	47
Louisiana, Texas, New Mexico, Oklahoma and Arkansas	26
Rocky Mountain (CO, ID, MT, UT, WY)	7
Pacific Northwest (AK, OR, WA)	4
Northern California, Northern Nevada, and Hawaii	14
Pacific Southwest (AZ, Southern CA, Southern NV)	7
Region Not Specified	2

The statistical information contained in this report is believed to be representative of the companies responding to the survey. All reasonable efforts were taken to assure data comparability within the limitations of accounting reporting procedures. However, the statistical validity of any given number varies depending upon sample sizes and the amount of consistency among responses for that particular ratio. For those individuals interested in more statistical detail than is contained in this report (such as sample sizes and/or standard deviation by specific ratio), contact:

Industry Insights, Inc.
2564 Billingsley Road
Columbus, Ohio 43085
614/889-8284

Fiscal Year-Ends

It is somewhat interesting to take note of the pattern of fiscal year-end dates among firms in the industry. The table below shows that of the firms responding to the 1986 ASA survey, over half (56.0 percent), reported that their fiscal year follows the calendar year. Among the other 44.0 percent of firms responding to the survey, fiscal year-ending dates were fairly evenly distributed throughout the year.

Month of Fiscal Year-Ends

Month	Percentage of Companies
January	6.1
February	9.6
March	8.5
April	2.4
May	1.4
June	2.0
July	1.0
August	1.0
September	3.8
October	2.7
November	4.1
December	56.0
Not Reported	1.4
Total	100.0%

Ratio Definitions and Sample Calculations

A primary purpose of the ASA Operating Performance Report of the P-H-C-P Wholesaler Industry is to provide a basis for comparing your own firm's performance with industry comparatives. In order to do this, it is necessary to calculate your firm's individual company ratios using the same methods that were used to compute the ratios in this report. These definitions appear on the pages which follow.

To further clarify the computational process, this section of the report also contains a completed survey form and sample calculations for a purely hypothetical company.

Note: Those firms that participated in the ASA survey received, absolutely free, a confidential Individual Company Report. This report presents a company's own ratios and data already computed in a manner consistent with those appearing in the industry report, and displayed alongside the appropriate industry comparatives. As a result, participating companies received invaluable information about their own business performance without having to spend time and effort to make the calculations manually.

Ratio Definitions and Sample Calculations

Performance Measure	Method of Computation () Indicates Survey Line #	Computational Example: Sample Co.	Suggested Uses
Overall Performance			
• Net Profit After Tax to Net Worth (%)	(16) Net Profit After Tax ÷ (27) Net Worth	$69,815 ÷ 1,072,599 = 6.5%	Overall financial performance from the owner's standpoint.
• Total Assets to Net Worth (X)	(23) Total Assets ÷ (27) Net Worth	$2,369,891 ÷ 1,072,599 = 2.2x	Setting policies concerning amount of debt vs. equity in the business.
• Net Profit After Tax to Total Assets (%)	(16) Net Profit After Tax ÷ (23) Total Assets	$69,815 ÷ 2,369,891 = 2.9%	Overall financial performance from a management standpoint.
• Net Sales to Total Assets (X)	(1) Net Sales ÷ (23) Total Assets	$5,884,780 ÷ 2,369,891 = 2.5x	Asset management--productivity of total asset base.
• Net Profit After Tax to Net Sales (%)	(16) Net Profit After Tax ÷ (1) Net Sales	$69,815 ÷ 5,884,780 = 1.2%	Margin management (gross margin and expenses)
• Net Profit Before Tax to Total Assets (%)	(14) Net Profit Before Tax ÷ (23) Total Assets	$114,136 ÷ 2,369,891 = 4.8%	Overall financial performance from a management standpoint ignoring tax considerations.
• EBIT[*] to Total Assets (%)	[(14) Net Profit Before Tax + (48) Interest] ÷ (23) Total Assets	[$114,136 +13,092] ÷ 2,369,891 = 5.4%	Same as previous ratio but ignores interest expense (leverage, not operations related)
Sales Analysis			
• Percent Sales Change from prior year	[(1) Net Sales - (39) Previous Years Sales] ÷ (39) Previous Years Sales	[$5,884,780 - 6,002,478] ÷ 6,002,478 = (2.0)	Indication of company growth. Caution should be used due to inflationary distortions.
Asset and Financial Management			
• Current Asset Turn (X)	(1) Net Sales ÷ (21) Total Current Assets	$5,884,780 ÷ 2,258,150 = 2.6x	Asset management - productivity of current asset base.
• Total Debt to Net Worth (%)	(26) Total Liabilities ÷ (27) Net Worth	$1,297,292 ÷ 1,072,599 = 120.9%	Measures overall leverage. Use to set policy of how much debt is employed relative to owner's funds.
• Current Debt to Net Worth (%)	(24) Current Liabilities ÷ (27) Net Worth	$520,042 ÷ 1,072,599 = 48.5%	A measure of the financial mix of the firm.
• Current Assets to Current Debt (x)	(21) Total Current Assets ÷ (24) Total Current Liabilities	$2,258,150 ÷ 520,042 = 4.3X	Good overall measures of liquidity. Used to stay within guides set by suppliers and creditors.
• Current Assets Less Inventory to Current Debt (X)	[(21) Total Current Assets - (19) Inventory] ÷ (24) Total Current Liabilities	[$2,258,150 - 983,840] ÷ 520,042 = 2.5x	Same as above ratio.
Transaction Data			
• Billing Lines Per Invoice	(45) Annual Billing Lines ÷ (44) Total No. Invoices	171,872 ÷ 21,484 = 8	Gives some indication of invoicing efficiency.
• Average Invoice Size ($)	(1)Net Sales ÷ (44) Total No. Invoices	$5,884,780 X .83 ÷ 21,484 = $227.35	Indicates the typical size of an invoice and thus add-on purchase efficiency.
• Average Billing Line ($)	(1)Net Sales ÷ (45) Annual Billing Lines	$5,884,780 X .83 ÷ 171,872 = $28.42	Indicates the size of a typical item billed.
Personnel Productivity			
• Payroll to Net Sales (%)	(29) Total Payroll Expenses ÷ (1) Net Sales	$604,313 ÷ 5,884,780 = 10.3%	Overall indicator of payroll cost control. Inflation proof. Compare: overtime; vs. industry; by store.
• Fringe Benefits to Net Sales (%)	(30) Total Fringe & Payroll Taxes ÷ (1) Net Sales	$234,303 ÷ 5,884,780 = 4.0%	Indicates how much of sales are paid in fringe benefits. Compare: overtime; vs. industry.
• Payroll and Fringes to Net Sales (%)	[(29) Payroll Expense + (30) Fringe Benefits] ÷ (1) Net Sales	[$604,313 + 234,303] ÷ 5,884,780 = 14.3%	Indicator of all personnel related costs.

[*] EBIT refers to "Earnings Before Interest and Taxes."

Ratio Definitions and Sample Calculations

Performance Measure	Method of Computation () Indicates Survey Line #	Computational Example: Sample Co.	Suggested Uses
Personnel Productivity (cont)			
• Payroll to Gross Margin (%)	(29) Total Payroll Expense ÷ (3) Gross Profit on Sales	$604,313 ÷ 1,492,481 = 40.5%	Indicates the portion of gross profits that are used in payroll costs.
• Fringe Benefits to Gross Margin (%)	(30) Total Fringe Benefits ÷ (3) Gross Profit on Sales	$234,303 ÷ 1,492,481 = 15.7%	Same as above but relative to fringe benefits.
• Payroll and Fringes to Gross Margin (%)	[(29) Total Payroll + (30) Total Fringes] ÷ (3) Gross Profit on Sales	[$604,313 + 234,303] ÷ 1,492,481 = 56.2%	Indicator of all personnel related costs that are used in gross margin production.
Inventory Management			
• Cost of Whse Goods Sold to Average Inventory (x)	[(34) Total Whse Sales - (37) Whse Gross Profit] ÷ [((19) Inventory + (40) Previous Years Inventory) ÷ 2]	[$5,240,136 - 1,396,217] ÷ [(983,840 + 992,313) ÷ 2] = 3.9x	Measure of inventory productivity. Compare to industry, over time or product categories.
• No. of Days Average Inventory Carried	[((19) Inventory + (40) Previous Years Inventory) ÷ 2] ÷ [((34) Whse Sales-(37) Whse Gross Profit) ÷ 365]	[($983,840 + 992,313) ÷ 2] ÷ [(5,240,136-1,396,217) ÷ 365] = 94 days	Similar in value to above measure. Shows how quickly inventory is moving.
• Total Cost of Goods Sold to Average Inventory (x)	(2) Total Cost of Goods Sold ÷ [((19) Inventory + (40) Previous Years Inventory) ÷ 2]	$4,392,299 ÷ [(983,840 + 992,313) ÷ 2] = 4.4x	Shows how many times you were able to "turn over" your inventory.
• Whse Gross Margin Return on Average Inventory (%)	(37) Whse Gross Profit ÷ [((19) Inventory + (40) Previous Years Inventory) ÷ 2]	$1,396,217 ÷ [(983,840 + 992,313) ÷ 2] = 141.3%	Overall measure of inventory, profitability and productivity. Combines margin and turnover.
• Turn & Earn Profitability Index (%)	[((34) Whse Sales-(37) Whse Gross Profit) ÷ ((19) Inventory + (40) Previous Years Inventory) ÷ 2] X [((37) Whse Gross Profit ÷ (34) Whse Sales) X 100]	[($5,240,136 - 139,217) ÷ (983,840 + 992,313) ÷ 2] X [(1,396,217 ÷ 5,240,136) X 100] = 103.9 ,	Another return-on-investment measure which combines margin and turnover.
Accounts Receivable			
• Average Collection Period	(18) Accounts & Notes Receivable (Net) ÷ [(1) Net Sales X (1.0 - (44) % Cash Sales) ÷ 365]	1,096,734 ÷ [5,884,780 X (1.0 - .17) ÷ 365] = 82 days	Measuring effectiveness of various collection policies. Compare to industry and over time.
• Gross Margin Return on Receivables (%)	[((3) Gross Profit ÷ (1) Net Sales) X 100] X [365 ÷ Average Collection Period]	[(1,492,481 ÷ 5,884,780) X 100] X [365 ÷ 82] = 112.9%	Indicator of how much gross margin dollars are being generated on your accounts receivables.
Operating Expense Control			
• Total Operating Expense to Net Sales (%)	(10) Total Operating Expense ÷ (1) Net Sales	$1,323,621 ÷ 5,884,780 = 22.5%	Conventional measure used for controlling total operating costs.
• Total Operating Expense to Gross Margin (%)	(10) Total Operating Expense ÷ (3) Gross Profit	$1,323,621 ÷ 1,492,481 = 88.7%	A somewhat more specific measure than the one above.
• Non-People Expense to Net Sales (%)	[(10) Total Operaging Expense - ((29) Payroll + (30) Fringes)] ÷ (1) Net Sales	[$1,323,621 - (604,313 + 234,303)] ÷ 5,884,780 = 8.2%	A measure for controlling all operating costs except personnel costs.
• Non-People Expense to Gross Margin (%)	[(10) Total Operating Expense - ((29) Payroll + (30) Fringes)] ÷ (3) Gross Profit	[$1,323,621 - (604,313 + 234,303)] ÷ 1,492,481 = 32.5	Same as above but somewhat finer.
Interest Expense			
• Interest Expense to Net Sales (%)	(46) Interest Expense ÷ (1) Net Sales	$13,092 ÷ 5,884,780 = 0.2%	An indicator of how much debt financing is costing the firm relative to sales.
• Times Interest Earned (X)	[(14) Net Profit Before Taxes + (46) Interest] ÷ (46) Interest	[$114,136 + 13,092] ÷ 13,092 = 9.7x	Indicates the ease in which your company can pay interest costs out of earnings.

CODE NUMBER

500

CONFIDENTIAL
AMERICAN SUPPLY ASSOCIATION

1986 ANNUAL OPERATING PERFORMANCE SURVEY
(Based on 1985 Financial Results)

With your help, the 1986 ASA Operating Performance Survey (of 1985 financial information) promises to be the best ever. Building upon the format and content improvements of the past few years, this year's study will also provide more trend information as well as other features. Most importantly, however, a confidential Individual Company Report of your own firm's financial ratios displayed alongside the appropriate industry comparatives will be available to you at no charge just for participating in the study. And . . . once again, the Individual Company Report will include certain three year trend information.

To participate and receive this invaluable free information about your firm, please take the time to fill in the data requested on this Survey Form using the following guidelines:

(1) Enter figures from your completed fiscal year which ended nearest to December 31, 1985. Full year data is required. Financial data need not be audited.

(2) Dollar amounts should be rounded to the nearest dollar. Eliminate "cents." Columns labeled "Code #" are for internal use only and should be ignored.

(3) Please report on the basis of your total firm rather than for individual branches.

While it is not necessary to fill in every line, be as complete as possible to assure that your Individual Company Report will be much more useful. *Or, if you prefer, just fill in the information on pages 2 and 4 and forward your "Income Statement and Balance Sheet" financials (or your most recent annual "Income Tax Form") for the most recent 12 month period along with this Survey Form.*

Please send your response
in the enclosed postage-paid, self-addressed envelope before

May 31, 1986 to:

Industry Insights, Inc.• P.O. Box 155• Dublin, Ohio 43017-9990•(614) 889-8284

Indicate below to whom any questions regarding this Form should be directed and to whom the final report should be sent. Industry Insights will detach this coupon to assure confidentiality.

Name (Questions) ______________________ Phone (____) __________

Name (Report) SAMPLE COMPANY

Company ______________________

Address ______________________

City __________ State __________ Zip __________

CODE NUMBER

500

167

CONFIDENTIAL

AMERICAN SUPPLY ASSOCIATION

1986 ANNUAL OPERATING PERFORMANCE SURVEY
(Based on 1985 Financial Results)

CLASSIFICATION DATA

Ending 12 month period upon which this data is based. (1) 12 / 31 / 85 (month / day / year)

Number of locations (including headquarters) which are included in the data reflected on this Survey Form. (Do not submit separate forms for branches.)

(2) 1

Regional Identification: Check (√) only one of the boxes below:

			Territory	Regional Association Affiliate
	1)	☐	CT, ME, MA, NH, RI, VT	PHWNE
	2)	☐	NY (excluding NYC)	NYSPHW
	3)	☐	Long Island and Metro NYC	JCA
	4)	☐	DE, E.PA, MD, NJ, Wa.D.C.	MAWA
	5)	☒	IN, OH, W.PA, WV	CWA
	6)	☐	AL, FL, GA, KY, MS, NC, SC, TN, VA	SWA
	7)	☐	Michigan (excluding Upper MI)	MAD
(3)	8)	☐	Metro Chicago, Northern IL	
	9)	☐	IA, KS, MN, MO, NE, ND, SD, Upper MI, WI, Southern IL	MASA
	10)	☐	LA, TX, NM, OK, AR	WDA
	11)	☐	Rocky Mountain (CO, ID, MT, UT, WY)	
	12)	☐	Pacific NW (AK, OR, WA)	
	13)	☐	HI, N.CA, N.NV	NCSA
	14)	☐	AZ, S.CA, S.NV	PSDA

Product Sales Mix – Please indicate the percentage of your total company sales accounted for by each type of product (estimate if necessary):

(4) 30 Plumbing Supplies & Equipment, Including Plumbing Pipe, Valves & Fittings.
(5) ____ Hydronic & Warm Air Heating & Air Conditioning Supplies & Equipment.
(6) 30 Industrial P–V–F (Industrial Pipe, Valves & Fittings).
(7) 30 Other Industrial Supplies & Equipment.
(8) 10 Other (Please specify: ____).
(9) 100% Total

Did your firm participate in this study last year? ☒ Yes ☐ No (87)

If yes, how many consecutive years have you participated? 4 (88)

INCOME STATEMENT ITEMS

LINE NO.		CODE #	AMOUNT IN DOLLARS (Omit Cents)
1	Net Sales (Include direct shipments. Deduct claims, returns & allowances but not cash discounts allowed on sales. Exclude sales taxes.)	(10)	$ 5,884,780
2	Cost of Goods Sold (Include inbound transportation costs. Subtract purchase claims, returns and allowances but not cash discounts on purchases.) (FIFO basis)*	(11)	$ 4,392,299
3	Gross Profit on Sales (Line 1 minus Line 2) (FIFO basis)	(12)	$ 1,492,481
4	Selling Expenses (refer to definition sheet)	(13)	$ 280,652
5	Delivery Expenses (refer to definition sheet)	(14)	$ 177,206
6	Warehouse Expenses (refer to definition sheet)	(15)	$ 197,090
7	General & Administrative Expenses (refer to definition sheet)	(16)	$ 562,999
8	Occupancy Expenses (refer to definition sheet)	(17)	$ 74,396
9	Other Operating Expenses (refer to definition sheet)	(18)	$ 31,278
10	Total Operating Expenses (Sum of Lines 4 thru 9)***	(19)	$ 1,323,621
11	Net Operating Profit (Lines 3 minus Line 10) (FIFO)	(20)	$ 168,860
12	Non-Operating Income (Include cash discounts on purchases, interest earned and other income items not directly related to the primary operations of the business)	(21)	$ 34,838
13	Non-Operating Expenses (Include cash discounts allowed on sales, interest paid, losses on sale of fixed assets, and other non-operating expenses or losses not already included above)	(22)	$ 89,562
14	Net Profit Before Taxes (Line 11 plus Line 12 minus Line 13) (FIFO)	(23)	$ 114,136
15	Income Taxes (Federal, State and City)	(24)	$ 44,321
16	Net Profit After Income Taxes (Line 14 minus Line 15) (FIFO)	(25)	$ 69,815

BALANCE SHEET ITEMS

17	Cash (Includes savings accounts, CD's and other temporary investments)	(26)	$ 159,182
18	Accounts & Notes Receivable, Trade (Net)	(27)	$ 1,096,734
19	Inventory (FIFO basis)	(28)	$ 983,840
20	Other Current Assets (Such as prepaid items, supplies, etc.)	(29)	$ 18,394
21	Total Current Assets (Sum of Lines 17 thru 20)	(30)	$ 2,258,150
22	All Other Assets (Any assets not included above)	(31)	$ 111,740
23	Total Assets (Sum of Lines 21 and 22) (Equal to Line 28) (FIFO basis)	(32)	$ 2,369,891
24	Total Current Liabilities (Due in less than 1 year)	(33)	$ 520,042
25	Total Long-Term Liabilities (Due in more than 1 year)	(34)	$ 777,250
26	Total Liabilities (Sum of Lines 24 and 25)	(35)	$ 1,297,292
27	Total Net Worth (or Owner's Equity) (FIFO)**	(36)	$ 1,072,599
28	Total Liabilities & Net Worth (Sum of Lines 26 and 27) (Equal to Line 23)	(37)	$ 2,369,891

*If on LIFO, subtract your "Annual additions to your LIFO reserves" from your cost of goods sold to obtain FIFO cost of goods sold.

**If on LIFO, add your total LIFO Reserve to your book net worth to get your FIFO net worth.

***If you are a Subchapter S Corportation or a partnership, allocate an appropriate management salary for Owner-Managers to the applicable operating expense category(s) and to total operating expense. This would be an amount similar to what would have to be paid to a non-equity owning manager or managers. Doing this will assure that your numbers will be comparable to corporations paying separate management salaries.

COMPENSATION DATA

LINE NO.		CODE #	AMOUNT
29	Total Payroll Expenses (Include salaries, bonuses and commissions paid to all employees, including owners; exclude fringe benefits and payroll taxes)	(38)	$ 604,313
30	Total of Fringe Benefit Payments and Payroll Taxes (Include company pension and profit sharing payments plus FICA, Workman's Compensation, Unemployment, Group Insurance, etc., for all employees, including owners)	(39)	$ 234,303
31	Gross Income of the Highest Paid Employee, Including Owners (refer to the person's W-2 statement gross income – as from salaries, commissions and bonuses, but excluding fringe benefits and payroll taxes)	(40)	$ 50,000
32	Gross Income (as above) of the Second Highest Paid Employee (including Owners)	(41)	$ 45,000

WAREHOUSE AND DIRECT SALES DATA

33	Dollar Amount of Direct (Drop) Shipment Sales	(42)	$ 644,644
34	Dollar Amount of Warehouse Sales (Counter and Delivery)	(45)	$ 5,240,136
35	Total Sales (Sum of Line 33 and 34) (Equal to Line 1)	(46)	$ 5,884,780
36	Dollar Amount of Gross Profit on Direct (Drop) Shipments	(47)	$ 96,264
37	Dollar Amount of Gross Profit on Warehouse Sales (Report of FIFO basis)	(48)	$ 1,396,217
38	Total FIFO Gross Profit (Sum of Lines 36 and 37) (Equal to Line 3)	(49)	$ 1,492,481

ADDITIONAL DATA (VERY IMPORTANT)

39	Previous Year's Net Sales	(50)	$ 6,002,478
40	Previous Year's Ending Inventory (FIFO basis)	(51)	$ 992,313
41	Average Number of Employees During 1985 (Include all management personnel and all other employees. Convert part-time employees into full-time equivalents depending upon how much they worked relative to full-time employees. For example, two half-time people each working 12 months would be counted as one employee)	(52)	# 21
42	Percent of Total 1985 Sales That Were Made for Cash (estimate if necessary)	(53)	17 %
43	Were you on a LIFO inventory valuation system during 1985?	(54)	Yes ☐ 1 No ☒ 2
44	Total Number of Customer Invoices During the Year	(55)	# 21,484
45	Annual # of Billing Lines on Customer Invoices (estimate if necessary)	(56)	# 171,872
46	Interest Paid in 1985 (Also include this amount in Line 13)	(57)	$ 13,092

DETAIL OF ACCOUNTS RECEIVABLE (END OF YEAR)

LINE NO.		CODE #	NUMBER OF ACCOUNTS	CODE #	AMOUNT IN DOLLARS
47	Current (0 - 30 Days Outstanding)	(58)	# 257	(64)	$ 571,339
48	31 - 60 Days Outstanding	(59)	# 47	(65)	$ 154,748
49	61 - 90 Days Outstanding	(60)	# 17	(66)	$ 189,310
50	Over 90 Days Outstanding	(61)	# 28	(67)	$ 181,337
51	Total Accounts Receivable (Sum of Lines 47 thru 50) (Equal to Line 18)	(63)	# 349	(69)	$ 1,096,734

american supply association

DESCRIPTION OF OPERATING EXPENSE CATEGORIES

Selling Expenses

Selling executive salaries, commissions and bonuses; outside and inside salespeople salaries, commissions and bonuses; other selling personnel (clerical, secretarial and order takers) salaries, bonuses and wages; selling personnel fringe benefits (life insurance; hospitalization; other employee insurance; social security taxes; unemployment taxes; pension trust contributions; profit-sharing trust contributions; other employee welfare; officer's life insurance).

Selling related: supplies; stationery; printing; automobile expense; travel and entertainment; dues and membership; conventions and meetings; education and training; advertising; promotions; brochures; showrooms; merchandise shows; miscellaneous.

Delivery Expenses

Delivery supervisor(s) salaries and bonuses; other delivery personnel (clerical, secretarial, drivers) salaries, bonuses and wages; delivery personnel fringe benefits (life insurance; hospitalization; other employee insurance; social security taxes; unemployment taxes; pension trust contributions; profit-sharing trust contributions; other employee welfare).

Delivery related: supplies; gas and oil; tires; other automotive supplies; towel and uniform services; trucks, automobiles and other equipment repairs and maintenance; insurance (automobiles and trucks); licenses; equipment rental; trucks, automobiles and other equipment depreciation; dues and memberships; education and training; travel and entertainment; delivery services (cartage, freight, express); miscellaneous.

Warehouse Expenses

Warehouse supervisor salaries and bonuses; other warehouse personnel (clerical, secretarial, laborers, and other) salaries, bonuses and wages; warehouse personnel fringe benefits (life insurance; hospitalization; other employee insurance; social security taxes; unemployment taxes; pension trust contributions; profit-sharing trust contributions; other employee welfare).

Warehouse related: supplies; travel and uniform services; equipment repairs and maintenance; insurance (inventory); equipment rental and depreciation; education and training; travel and entertainment; miscellaneous.

General Administrative Expenses

Executive salaries and bonuses; supervisor salaries and bonuses; other salaries and bonuses (including buyers); general and administrative personnel fringe benefits (life insurance; hospitalization; other employee insurance; social security taxes; unemployment taxes; pension trust contributions; profit-sharing trust contributions; other employee welfare; officer's life insurance).

General and administrative related expenses (including purchasing expenses); supplies; stationery and printing; travel and uniform services; telephone and telegraph; postage; automobiles and other equipment repairs, maintenance, and depreciation; insurance (property, automotive, etc.); licenses, equipment and automobile rental; furniture and fixtures depreciation; automobile expense; travel and entertainment; dues and memberships; conventions and meetings; education and training; employment advertising; collection expense; cash over or short; donations; accounting services; legal services; other services; directors fees; miscellaneous. Also include bad debts written off.

Occupancy Expenses

Facilities management supervisor salaries and bonuses; janitor and maintenance personnel wages; occupancy personnel fringe benefits (life insurance; hospitalization; other employee insurance; social security taxes; unemployment taxes; pension trust contributions; profit-sharing trust contributions; other employee welfare).

Janitor and maintenance supplies; building and building equipment repairs and maintenance; janitor service; building and building equipment insurance; real estate taxes; rent (if applicable); building equipment rental; utilities (power, light, water, heat); building and building equipment depreciation (if applicable); miscellaneous.

Other Operating Expenses

All operating expenses not specified above.